Capalina Apartments

Draft Environmental Impact Report

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Prepared for:

City of San Marcos
Planning Division
1 Civic Center Drive
San Marcos, CA 92069
Contact: Chris Garcia, Senior Planner

Prepared by:

Sophia Mitchell & Associates
P.O. Box 1700
Gualala, CA 95445
Contact: Sophia Habl Mitchell

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Acronyms

AB	Assembly Bill
ADA	Americans with Disabilities Act
ACC	Advanced Clean Cars
ADT	Average Daily Traffic
AF	Acre Feet
AFY	Acre Feet Per Year
AGS	Advanced Geotechnical Solutions, Inc.
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMI	Area Median Income
AMSL	Above Mean Sea Level
ANSI	American National Standards Institute
APN	Assessor's Parcel Number
AQIA	Air Quality Impact Assessment
AQMD	Air Quality Management District
ASTM	American Society for Testing and Materials
BAU	Business-As-Usual
BMP	Best Management Practices
BTA	Bicycle Transportation Account
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Program
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Cal/OSHA	State of California Occupational Safety and Health Administration
CaRFG	California Reformulated Gasoline
CalRecycle	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
CAS	California Approved Samplers
CBC	California Building Code
CC&R	Covenants, Conditions, and Restrictions
CCA	Community Choice Aggregation
CCR	California Code of Regulations
CCSYA	Critical Coarse Sediment Yield Areas
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLIS	Compensation and Liability Information System
CESA	California Endangered Species Act
CFC	California Fire Code

CFD	Community Facilities District
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CFS	Cubic Feet Per Second
CGS	California Geological Survey
CH_4	Methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIP	Capital Improvement Program
CIWBM	California Integrated Waste Management Board
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	CO_2 Equivalent
COPPS	Community Oriented Police and Problem Solving
CORRACTS	Corrective Action Sites
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CRHR	California Register of Historic Resources
CSUSM	California State University San Marcos
CWA	Clean Water Act
CWC	California Water Code
CWPP	Community Wildfire Protection Plan
CY	Cubic Yard
dB	Decibel
dBA	A-weighted Decibel
DDE	Dichlorodiphenyldichloroethylene
DEH	Department of Environmental Health
DEIR	Draft Environmental Impact Report
DOF	Department of Finance
DOT	Department of Transportation
DPM	Diesel Particulate Matter
DPR	Department of Parks and Recreation
DTSC	Department of Toxic Substances Control
DU	Dwelling Unit
DU/Acre	Dwelling Unit/Acre
DWR	Department of Water Resources
E	East
EDCO	EDCO Waste and Recycling
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EO	Executive Order
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System

ESA	Endangered Species Act
ESA	Environmental Site Assessment
EV	Electric Vehicle
EWPCF	Encina Water Pollution Control Facilities
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FAR	Floor Area Ratio
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FPA	Focused Planning Area
FRA	Federal Rail Administration
FT	Feet
FTA	Federal Transit Administration
FT/S	Feet per Second
GHG	Greenhouse gas
GO-Biz	Governor's Office of Business and Economic Development
GPA	General Plan Amendment
GPD	Gallons Per Day
GW	Gigawatt
GWP	Global Warming Potential
HA	Hydrologic Area
HAPs	Hazardous Air Pollutants
HCFC	Hydrochlorofluorocarbons
HCM	Highway Capacity Manual
HFC	Hydrofluorocarbons
HFRA	Health Forests Restoration Act
HMBP	Hazardous Material Business Plan
HMP	Hydromodification Plan
HP	Horsepower
HP-h	Horsepower Hour
HRA	Hazards Risk Assessment
HREC	Historical Recognized Environmental Condition
HVAC	*Heating, Ventilation, and Air Conditioning*
H&SC	Health and Safety Code
IBC	International Building Code
IC/EC	Institutional Controls/ Engineering Controls
IEPR	Integrated Energy Policy Report
IFC	International Fire Code
IIRP	Individual Integrated Resource Plan
IN	Inch
in/sec	inch per second
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
IWMP	Integrated Waste Management Plan
JRMP	Jurisdictional Runoff Management Program

KBtu	One Thousand British Thermal Units
kV	Kilovolt
kWh	Kilowatt-hour
Lbs/Day	Pounds per Day
LED	Light Emitting Diode
Leq	Equivalent Sound Level
LI	Light Industrial
LID	Low Impact Development
LOS	Level of Service
LTS	Less than Significant
LTSM	Less than Significant with Mitigation
MBTA	Migratory Bird Treaty Act
MEP	Maximum Extent Possible
MG	Million Gallon
MGD	Million Gallons Per Day
MHCP	Multiple Habitat Conservation Plan
MM	Mitigation Measure
MMT	Million Metric Tons
MPH	Miles Per Hour
MRF	Meadowlark Reclamation Facility
MRZ	Mineral Resource Zone
MS4s	Separate Storm Sewer Systems
MSSC	Minor Street Stop Controlled Intersection
MT	Metric Ton
MU2	Mixed Use 2
MU3	Mixed Use 3
MWD	Metropolitan Water District
N_2	Nitrogen
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NBL	Northbound Lane
NCCP	Natural Community Conservation Planning
NCTD	North County Transit District
NEVs	Neighborhood Electric Vehicles
NFRAP	No Further Remedial Action Planned
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO_2	Nitrogen Dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSLU	Noise Sensitive Land Use
NTA	Northern Tributary Area
O_2	Oxygen
O_3	Ozone
OEHHA	Office of Environmental Health Hazards Assessment

OPR	Office of Planning and Research
Pb	Lead
PDP	Priority Development Project
PFCs	Perfluorocarbons
PFF	Public Facility Fee
PG&E	Pacific Gas & Electric
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Respirable Particulate Matter
POC	Point of Confluence
PPB	Parts Per Billion
PPHM	Parts Per Hundred Million
PPM	Parts Per Million
PPV	Peak Particle Velocity
PRC	Public Resources Code
PV	Photovoltaic
RAQS	Regional Air Quality Strategies
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
REL	Reference Exposure Levels
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RMP	Risk Management Plan
RMS	Root Mean Square
ROG	Reactive Organic Gas
ROZ	Ridgeline Overlay Zone
RPS	Renewable Portfolio Standard
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
RZ	Rezone
S.F.	Square Feet
SF_6	Sulfur Hexafluoride
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric
SDP	Site Development Plan
SF_6	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SIP	State Implementation Plans
SLCP	Short-Lived Climate Pollutants

SLF	Sacred Lands File
SMFD	San Marcos Fire Department
SMFPD	San Marcos Fire Protection District
SMUSD	San Marcos Unified School District
SO_2	Sulfur Dioxide
SRA	State Responsibility Areas
SR-78	State Route 78
SUSMP	Standard Urban Stormwater Mitigation Plan
SWDA	Solid Waste Disposal Act
SWRCB	State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
SWQMP	Stormwater Quality Management Plan
TACs	Toxic Air Contaminants
T-BACT	Toxics Best Available Control Technology
TCA	Traditionally and Culturally Affiliated
TCP	Traditional Cultural Properties
TDM	Transportation Demand Management
TIAG	Transportation Impact Analysis Guidelines
TMDL	Total Maximum Daily Load
TSD	Treatment, Storage and Disposal
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
V/C	Volume-To-Capacity
Vdb	Vibration Velocity
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VWD	Vallecitos Water District
WB	Westbound
WELO	Water Efficiency Landscape Ordinance
WMA	Watershed Management Area
WQIP	Water Quality Improvement Plan
WUI	Wildland Urban Interface
ZEB	Zero Emission Bus
ZEV	Zero Emission Vehicle
µg/m3	Micrograms Per Cubic Meter

1.0 Executive Summary

1.1 Project Summary

The applicant is proposing to develop 119 multi-family residential units, 4,000 square feet (s.f.) of commercial use and associated common and private open space as contemplated on a 2.51 acre site located on Capalina Road in the City of San Marcos.

The project applicant is requesting the following discretionary approvals from the City to allow for development of the proposed project:

- **General Plan Amendment (GPA22-0003)** – A General Plan Amendment would be required to change the existing Mixed Use 3 (MU3) designation to Mixed Use 2 (MU2)
- **Rezone (R22-0003)** - A rezone would be required to change the existing Mixed Use 3 (SP) (MU-3-SP)) zoning to Mixed Use 2 (MU-2).
- **Site Development Plan (SDP22-0007)** - The Site Development Plan approval would be required to construct 119 multi-family residential units and 4,000 s.f. of commercial space and address the details of the architectural style, building elevation, fencing, landscaping, among other criteria, within the development.

1.2 Summary of Significant Effects/Mitigation

Table 1-1 provides a summary of potentially significant environmental impacts resulting from the project, mitigation measures identified to reduce and/or avoid the environmental effects, and a determination of the level of significance of each impact following implementation of the identified mitigation measures. The analysis shows that, with implementation of mitigation measures, all project impacts will be mitigated to below a level of significance. Detailed analyses of significant environmental effects and mitigation are provided in Chapter 3 of this Environmental Impact Report (EIR).

In addition to mitigation measures, regulatory standards for grading, construction, and environmental protection have been incorporated into the project design to reduce adverse environmental effects. These include, but are not limited to, grading design and earthwork specifications, erosion control measures, Best Management Practices for pollutant control during construction, and biofiltration basins to handle and treat runoff.

The mitigation measures listed in Table 1-1 will reduce impacts related to biological resources, cultural resources/tribal cultural resources, and geology and soils. As shown in Table 1-1, all impacts would be reduced to below a level of significance.

Table 1-1. Summary of Potentially Significant Environmental Impacts

Impact	Mitigation Measures	Level of Significance After Mitigation
Biological Resources		
BIO-1: Potential to impact avian species protected under the Migratory Bird Treaty Act if tree	Implementation of MM-BIO-1, refer to Section 3.3.6	Less than significant

Impact	Mitigation Measures	Level of Significance After Mitigation
removal, vegetation removal, or other construction activities occur during the nesting season.		
Cultural Resources and Tribal Cultural Resources		
CR-1: Due to grading and ground disturbing activities, the project has the potential to impact unidentified archeological resources on the project site.	Implementation of MM-CR-1 through MM-CR-3, refer to Section 3.4.6	Less than significant
CR:2 There is a potential for project construction activities to disturb previously unidentified human remains on the project site.	Implementation of MM-CR-4, refer to Section 3.4.6	Less than significant
Geology and Soils		
GEO-1: Project grading may result in disturbance of previously unknown paleontological resources.	Implementation of MM-GEO-1, refer to Section 3.6.6	Less than significant

1.3 Areas of Controversy

A Notice of Preparation (NOP) was distributed on May 1, 2023, for a 30-day public review and comment period. Additionally, a public scoping meeting was held on May 11, 2023.

Comments received during the NOP public scoping period were considered part of the preparation of this EIR. The NOP and written comments are included in Appendices B.2 and B.3 to this EIR. Topics raised during the NOP comment period and scoping meeting include:

- Biological Resources: biological resource inventory, impact/mitigation, MHCP alignment, cumulative effects analysis, rare plants (brodiaea), vegetation characterization, and nesting bird avoidance;
- Cultural and Tribal Cultural Resources: compliance with Assembly Bill 52 and Senate Bill 18;
- Hydrology/Water Quality: design of water quality features to minimize potential for mosquito breeding sources;
- Land Use: Request to change the project to a park instead of a mixed-use residential development;
- Noise: existing noise in the area from the SPRINTER, traffic, and adjacent commercial uses;
- Public Services (police): concerns regarding crime and loitering;
- Transportation (pedestrian): pedestrian connectivity crosswalks), paths of travel from the SPRINTER station to the project area, lighting for pedestrians; and

- Transportation (vehicular): congestion at SR-78/Rancho Santa Fe ramp, cut through traffic/speeding, and parking.

These concerns are addressed in Chapters 3 and 4 of this EIR.

1.4 Issues to be Resolved

An EIR is an informational document intended to inform the public agency decision makers and the public of the significant effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

The lead agency must respond to each significant effect identified in the EIR by making "Findings" for each significant effect. The issues to be resolved by the decision makers for the project include whether or how to mitigate the associated significant effects, including whether to implement a project alternative.

Issues to be resolved that are directly related to the proposed project include the choice among the alternatives and whether or how to mitigate the significant effects. In particular, the decision makers must decide if the significant impacts to biological resources, cultural resources/tribal cultural resources, and geology and soils have been mitigated to less than significant. Lastly, the decision makers must determine whether any of the project alternatives would substantially reduce significant effects while still meeting key objectives of the project.

1.5 Project Alternatives

Three alternatives are proposed to provide an understanding of how environmental effects could be reduced by varying the design and scope of the project. **Table 1-2** provides a comparison of the impacts of project alternatives to the impacts of the proposed project.

1.5.1 No Project/No Development Alternative

Under the No Project/No Development Alternative, the proposed project would not be implemented, and the project site would remain undeveloped and in its current condition. No grading or construction would occur on the project site under this alternative. The project site is currently undeveloped and supports disturbed habitat.

Since the No Project/No Development Alternative would not develop any residential or commercial uses on the project site, overall impacts would be less than those of the proposed project or eliminated entirely. There are some benefits of the project that would not be realized under this alternative, including providing additional housing units, including affordable units which helps the City meet its Regional Housing Need Allocation numbers. Under this alternative, the frontage improvements, including a sidewalk along Capalina Road, and restriping and extension of the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road would not be realized. Under this alternative there would not be any payment of the City's PFF, which goes toward supporting a variety of services and improvements in the City, including but not limited to Circulation Streets, SR-78 Interchanges, National Pollutant Discharge Elimination System, Tech Improvements, and Parks, and Habitat Conservation. Payment of these fees provide improvements that benefit all residents of the City. Similarly, this alternative would not contribute any school fees. Finally, this alternative would not meet any of the project objectives.

1.5.2 No Project/Existing Plan Alternative

Under the No Project/Existing Plan Alternative, the project site would be developed consistent with the site's existing land use. Per the City's General Plan, the project site has an existing General Plan Land Use designation of Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a maximum floor area ratio (FAR) of 1.50. A development scenario that would meet the requirements of the MU-3 (SP) zoning would include a four-story mixed-use office building with 90,000 s.f. of office use and 10,000 s.f. of retail uses along the Capalina Road frontage , with a floor area ratio of 1.5. Up to 400 parking spaces would be required and would be a mix of structured parking and ground-level parking. For the structured parking, one level would be below grade (subterranean). Overall, the development footprint would be the same, however, more grading and excavation would be required to prepare for subterranean parking.

The No Project/Existing Plan Alternative would result in a more intensive use on the project site, including more than double the trip generation compared to the proposed project (2,200 ADT compared to 874 ADT). This results in a corresponding proportional increase in air and GHG emissions and noise from vehicles compared to the proposed project. Construction-related air pollutant and GHG emission are also expected to be greater since this alternative would require more grading and excavation to accommodate subterranean parking.

Footprint-specific impacts, such as those related to biological resources, cultural and tribal cultural resources, and geology and soils would be similar as the proposed project as the same amount of site area would be disturbed.

This alternative would not generate any students for SMUSD and would reduce demand for parks, libraries, water, and sewer services compared to the proposed project. This alternative would result in a VMT impact and require mitigation to reduce VMT to 85% of the regional mean for employees. This alternative does not meet any of the project objectives.

1.5.3 Reduced Intensity Alternative

Under the Reduced Intensity Alternative, the project site would be developed with 75 residential apartments and 4,000 s.f. of commercial use for a density of 30 du/acre. The project proposes a density of 47 du/acre. A General Plan Amendment and Rezone would be required for this alternative to change the site from MU-3 to MU-2. Overall, the development footprint and area of disturbance would be similar to that of the proposed project, but with less density of residential units. The building would still be four stories high, which would allow for larger units. Private and common open space would be provided consistent with the City's Outdoor Space Standards (Section 20.255.120 of the San Marcos Municipal Code). Architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development.

The Reduced Intensity Alternative would reduce the number of residential units constructed on the project site. Compared to the proposed project, which generates 874 ADT, this alternative would reduce ADT by 30%. This results in a corresponding decrease in decrease in vehicular-related air and GHG emissions and noise from offsite traffic compared to the proposed project. Public services, utilities and service systems, and energy demands would also proportionally decrease. Footprint specific impacts, such as those related to biological resources, cultural and tribal cultural resources, and geology and soils would be similar as the proposed project since a similar area of disturbance would occur under this alternative. This alternative would contribute less PFF and school fees since

fewer residential units would be constructed. This alternative would meet the majority of the project objectives as detailed in **Table 1-3**.

1.5.4 Environmentally Superior Alternative

Table 1-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As shown in Table 1-2 the No Project/No Development Alternative would eliminate all of the potentially significant impacts identified for the project. However, the No Project/No Development Alternative would not meet any of the project objectives. Additionally, there is no certainty that the project site would remain undeveloped in perpetuity. CEQA Guidelines Section 15126.6(e)(2) states that if the No Project alternative is identified as the environmentally superior alternative, then an environmentally superior alternative should be identified among the other alternatives.

Among the other alternatives, not including the proposed project, the Reduced Intensity Alternative is the environmentally superior alternative because it would provide a reduced level of impact in some environmental analysis areas including air quality, GHG, noise, public services, recreation, and utilities/service systems. Mitigation measures would still be required to mitigate impacts to biological resources, cultural resources, geology and soils, tribal cultural resources.

Table 1-2. Comparison of Impacts of Proposed Project and Alternatives

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative	Reduced Intensity Alternative
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Air Quality	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Energy	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Geology and Soils	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Greenhouse Gas Emissions	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Hazards and Hazardous Materials	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Hydrology and Water Quality	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Land Use and Planning	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Same)
Noise	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative	Reduced Intensity Alternative
Population and Housing	LTS	No Impact (Reduced)	No Impact (Reduced)	LTS (Reduced)
Public Services	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)
Recreation	LTS	No Impact (Reduced)	No Impact (Reduced)	LTS (Reduced)
Transportation	LTS	No Impact (Reduced)	LTSM (Increased)	LTS (Reduced)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)

Notes: Impact Status: LTS = Less than significant impact; LTSM = Less than significant with mitigation

Table 1-3. Summary of Alternatives and Project Objectives

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Intensity Alternative
Provide a multi-family housing opportunity through a range of unit types, sizes, and number of different bedroom counts, including studios, one, two, and, three-bedroom units, as well as a range of affordability to accommodate a full spectrum of family demographics to contribute to the growing housing needs of the region.	Meets objective	Does not meet this objective	Does not meet this objective	Meets objective
Integrate high-density housing opportunities and commercial uses close to major transit corridors, education facilities, and job centers to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce energy usage, air pollutions and greenhouse gas emissions.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective
To the extent possible given the site constraints, maximize the opportunity to provide high-density housing for the City of San Marcos in the 45-50 dwelling unit/acre density range.	Meets objective	Does not meet this objective	Does not meet this objective	Partially meets this objective

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Intensity Alternative
Support the housing needs of the City of San Marcos and the region by developing high-quality, workforce housing that balances density with price-points and long-term maintenance costs, such that new apartments remain financially attainable.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective
Incorporate deed restricted affordable housing into a portion of the proposed project.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective

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2.0 Project Description, Location and Environmental Setting

This Draft Environmental Impact Report (EIR) has been prepared by the City of San Marcos to evaluate the potential effects associated with the construction and implementation of the proposed Capalina Apartments Project (proposed project) as described in Section 2.2 of this (EIR.) The EIR is intended to provide information to the San Marcos City Council, public agencies, stakeholders and organizations, and the general public regarding the potential environmental impacts, mitigation measures, and alternatives to the proposed project.

2.1 Project Objectives

The following objectives describe the underlying purpose of the proposed project and provide a basis for identification of a range of reasonable alternatives evaluated in the EIR.

- Provide a multi-family housing opportunity through a range of unit types, sizes, and number of different bedroom counts, including studios, one, two, and, three-bedroom units, as well as a range of affordability to accommodate a full spectrum of family demographics to contribute to the growing housing needs of the region.
- Integrate high-density housing opportunities and commercial uses close to major transit corridors, education facilities, and job centers to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce energy usage and air pollutant and greenhouse gas (GHG) emissions.
- To the extent possible given the site constraints, maximize the opportunity to provide high-density housing for the city of San Marcos in the 45-50 dwelling unit/acre density range.
- Support the housing needs of the City of San Marcos and the region by developing high-quality, workforce housing that balances density with price-points and long-term maintenance costs, such that new apartments remain financially attainable.
- Incorporate deed restricted affordable housing into a portion of the proposed project.

2.2 Project Description

The approximate 2.51-acre development site is located in the City of San Marcos in northern San Diego County. Specifically, the site is located on the north side of Capalina Road, between N. Rancho Santa Fe Road and N. Pacific Street in the Business/Industrial District (project site). The assessor parcel number (APN) is 219-115-33-00 (**Figure 2-1**).

The project applicant is requesting approval of a General Plan Amendment, Rezone, and Site Development Plan. If approved, these entitlements would allow for the development of a multi-family apartment project on the project site with some commercial uses.

The proposed project would allow for the development of 119 apartments and associated common and private open spaces and 4,000 square feet (s.f.) of commercial use. The proposed project includes infrastructure improvements as described in greater detail below. The conceptual site plan is included in **Figure 2-2**.

2.2.1 Discretionary Actions

As mentioned above, the requested project entitlements/discretionary actions, and permits by the City include a General Plan Amendment, Rezone, and Site Development Plan, Each of these actions is described in more detail below. The project plans are included as **Appendix A**.

General Plan Amendment (GPA22-0003) – A General Plan Amendment would be required to change the existing Mixed Use 3 (MU3) designation to Mixed Use 2 (MU2).

Rezone (R22-0003) - A rezone would be required to change the existing Mixed Use 3 (MU-3-SP) zoning to Mixed Use 2 (MU-2).

Site Development Plan (SDP22-0007) - The Site Development Plan approval would be required to construct 119 multi-family residential units and 4,000 s.f. of commercial and address the details of the architectural style, building elevation, fencing, landscaping, among other criteria, within the development.

2.2.2 Project Characteristics

This section details the characteristics of the proposed project.

2.2.2.1 Land Use

Residential Land Use and Density Bonus

The project proposes 119 residential apartments on 2.51 gross acres for a proposed density of 47 dwelling units/acre. Six of the units would be affordable at the very low-income level (30-50% of the Area Median Income or AMI)[1]. The site plan exhibit is included as **Figure 2-3** at the end of this section.

The project site is located within the SM-7 Mixed Use Transit Corridor as identified in the San Diego Association of Governments (SANDAG) Smart Growth Concept Map for North County. The project applicant would utilize the State Density Bonus Program and a minimum of 5% of the units would be affordable housing units, as defined under the State Density Bonus Law, California Government Code (Section 65915 – 65918) as enacted by California Assembly Bill No. 2345 (State Density Bonus). The Density Bonus Law allows for parking reductions and, in addition, the allowance of "incentives" or "concessions" from the local jurisdiction to assist with the construction and economic viability of the project.

Chapter 20.305 of the City's Zoning Ordinance addresses the Density Bous law and states that it is the intent of the City to encourage and facilitate development of affordable housing and to implement the goals, objectives, and policies of the City's Housing Element.

The proposed project would mainly rely on the State Density Bonus law parking ratios for residential parking. However, the proposed project would use an incentive, as provided by the State Density Bonus law, in order to adjust the proposed residential parking from 147 spaces to 142 spaces and adjust the commercial parking from 12 spaces to 5 spaces. The proposed project is also requesting waivers for development standards relating to minimum floor area ratio (FAR) and setbacks.

[1] Area Median Income (AMI) is the midpoint of a region's income distribution- half of the families in a region earn more than the median and half earn less than the median. This can also be looked at as the Median household income.

Commercial Use

The project proposes 4,000 s.f. of commercial use. This would be located on the ground floor in Building A along a portion of the Capalina Road project frontage.

W. Mission Road Right-of-Way Dedication

The proposed project includes a right-of-way dedication of 12,632 s.f. (0.29 acres) along the northern project boundary related to a future design of W. Mission Road.

Open Space

A total of 34,582 s.f. of open space is proposed. This represents approximately 32 percent of the project site. There are two main categories of open space proposed for the project – common open space and private open space.

Common Open Space

Common open space includes both indoor and outdoor common space. The outdoor common space would be 25,700 s.f. and includes 24,415 s.f. at grade (pool, spa, outdoor "living room", open turf area with play equipment and passive open space areas) and a 1,285 s.f. rooftop deck. The proposed common indoor space would be 1,250 s.f. and includes a fitness area and meeting room. All common open space would be for the use of future residents and would be maintained by the property management company.

Private Open Space

Private open space is associated with private patio and balcony areas on the residential units and totals 7,632 s.f. Private open space ranges from 396 s.f. to 2,706 s.f. per unit, depending on the unit layout and location.

Landscape Plan

The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: Marina strawberry tree, Chinese flame tree, African sumac, Brisbane box, true green elm, crape myrtle, sweetshade, sweet bay, shrubby yew podocarpus, Carolina laurel, tipu tree, and pink trumpet tree. The proposed project would also comply with the City's Model Water Efficient Landscape Ordinance (WELO) and Municipal Code, Title 20. The landscape concept plan is included as **Figure 2-4** and the complete landscape plan and planting palette is included in **Appendix A.2.**

Slope Easement Vacation

The proposed project would abandon/vacate a City slope easement per recorded document 2004-0229021. This easement is located in the northwestern corner of the project site.

2.2.2.2 Architectural Design

The residential units would be spread across two buildings, identified as Building A and Building B. Building A is an L-shaped building fronting Capalina Road, would be four stories tall, and have a maximum height of approximately 56 feet. Building B, which is a rectangular shape and fronts on W. Mission Road, would also be four stories and have a maximum height of approximately 51 feet. The

residential units with direct line-of-sight to W. Mission Road would have enhanced balcony and patio shielding consisting of 5-foot barriers The barriers would be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials.

Overall, the project proposes 11 studio/one bath units (600 s.f.), 53 one bedroom/one bath units (ranging from 680 s.f. to 710 s.f.), 6 two bedroom/one bath units (925 s.f.), 41 two bedroom/two bath units (1,080 s.f.), and 8 three bedroom/2 bath units (1,130 s.f.). Proposed materials include stucco walls, composite shingle roof material, resawn wood fascia, trim detailing, and metal railing. Elevations for Building A are presented in **Figures 2-5a and 2-5b.** Elevations for Building B are presented in **Figures 2-6a and 2-6b**. The proposed recreation area is presented in **Figure 2-7**.

2.2.2.3 Walls, Fencing, and Lighting

Walls and fencing within the proposed project are functional boundaries framing outdoor spaces and complementary pieces of the landscape design. Walls and fences create partitions between private open space, screen the development from roadways and enhance the overall site design.

Fencing and Walls

The project proposes the use of black tubular steel fencing. Along the northern project boundary, the fencing would be six feet in height with a steel access gate which would provide pedestrian access to the sidewalk on W. Mission Road and to the NCTD bus stop. On the western project boundary, the fencing would also be six feet in height. On the eastern project boundary, 42-inch tubular steel fencing is proposed atop the retaining wall. The retaining wall would vary from 1 foot to 6 feet, with the lower heights near Capalina Road and W. Mission Road and the highest point along the middle of the project's eastern boundary.

Lighting

Lighting for the proposed project would be used to accent landscaping and provide safety and accent lighting for then apartment buildings. All lighting fixtures for the proposed project would be energy efficient, architecturally appropriate, and designed to minimize glare, conflict, and light pollution, while providing illumination levels that create a safe environment for both vehicles and pedestrians. Street area lights would be full cut-off fixtures and would utilize house-side shields to reduce light trespass and prevent light pollution. Common area lighting would be used to enhance and complement the character of the development. Lighting would be required to conform with the City's lighting ordinance and standards, (San Marcos Municipal Code Title 20, Section 20.300.080).

2.2.2.4 Access, Circulation and Parking

Access and Circulation

Access to the project site would be via two unsignalized driveways on Capalina Road. Both driveways would be ungated and will be 24 feet wide. The ramps at the driveway aprons would have truncated domes and would meet the American's With Disabilities Act (ADA) standards as required by the City's standards.

Internal vehicular movement would be via 24-foot-wide drive aisles. No vehicular access is offered from W. Mission Road.

The proposed project would provide frontage improvements on Capalina Road which would include a sidewalk which would connect to the existing sidewalk to the west. A pedestrian gate for use by residents would also be provided on the northern side of the project to connect to the existing sidewalk on W. Mission Road. This would also provide easy access to the North County Transit District (NCTD) bus stop on W. Mission Road adjacent to the project site.

Parking

The project proposes a total of 147 commercial spaces, with 142 spaces for the proposed residential use and five spaces for commercial use. Three of the 147 parking spaces would be ADA spaces. An additional eight parking spaces would be provided off-site along Capalina Road along the project frontage. Electric vehicle (EV) parking is incorporated in the project parking and includes 8 spaces with Level 2 EV chargers, 15 EV capable spaces and 36 EV ready spaces. The proposed project would mainly rely on the State Density Bonus law parking ratios for residential parking. However, the proposed project would use an incentive, as provided by the State Density Bonus law, in order to adjust the proposed residential parking from 147 spaces to 142 spaces and adjust the commercial parking from 12 spaces to 5 spaces.

2.2.2.5 Grading and Construction Phase

The project is anticipated to start construction in 2025. The project would be constructed in one phase and all construction materials would be stored on site. Grading would consist of approximately 4,030 cubic yards (cy) of cut material and 12,270 cy of fill material requiring an import of approximately 8,240 cy of material. Assuming 20 work days for materials import and the use of a 15 cy truck, there would be approximately 28 truck loads per day during grading. No blasting or rock crushing is proposed as part of the project.

The import and export of earth material is guided by Section 17.32.080 of the City's Municipal Code and prior to any import of soils, a haul route would be submitted for review and approval by the City Engineer. Additionally, grading and other earth moving activities are restricted to the hours of 7:00 AM and 4:30 PM, Monday through Friday, per Section 17.32.180 of the City's Municipal Code.

The project would comply with San Diego Air Pollution Control District (SDAPCD) Rule 55 – Fugitive Dust Control. This rule limits airborne dust beyond the property line and the property line and roadway dust associated with construction equipment and trucks.

2.2.2.6 Public Utilities and Services

Water and Wastewater Facilities

The project site is within the service area of Vallecitos Water District (VWD) for water service and sewer service. The project would connect to the existing 8-inch water main and 8-inch sewer main in Capalina Road. The project would also construct an 8-inch water main through the project site to create a looped water main connecting Capalina Road and W. Mission Road and dedicate an easement to VWD through the project's drive aisle. Please see section 2.2.3.4 for a discussion of off-site utilities improvements.

Site Drainage and Stormwater Management

Storm drain systems and connections would be designed to accommodate the proposed future development. Two biofiltration basins are proposed to mitigate the storm water quality for the project

(BMP-A and BMP-B). BMP-A is located near the northeast corner of the site and BMP-B is located near the northwest corner of the site. The biofiltration basins would collect the storm water runoff from the building and proposed parking lots and convey the storm water through storage tanks, storm drain systems and curb and gutters. Hydromodification flow-control and 100-year detention conjunctive use facility is proposed as BMP-C within the project parking area and drive aisle. All storm water quality and drainage facilities would be required with final engineering submittals in conformance with the 2023 City of San Marcos Best Management Practices Design Manual, and the project's Storm Water Quality Management Plan and Drainage Study.

Electricity and Gas

The project would be served by San Diego Gas & Electric (SDG&E) for electricity and gas service. The design for the dry utilities connection are still under preparation, however the project would connect to existing infrastructure within Capalina Road or W. Mission Road. This work would take place within existing right-or-way and would not disturb any vegetation. The project would also relocate an SDG&E transformer located on Capalina Road.

Solid Waste Disposal

Solid waste collection and recycling services to the proposed project would be provided by EDCO Waste & Recycling. Non-recyclable waste, including general trash and green materials, is collected and transported to the Sycamore Sanitary Landfill in Santee. Recyclable materials are transferred to the Escondido Resources Recovery Transfer Station for further processing.

Fire Protection

The San Marcos Fire Department (SMFD) would provide fire protection for urban and wildland fires and emergency services to the project site. SMFD services San Marcos with four stations, the closest of which is Fire Station No. 1 located at 180 W. Mission Road, approximately 2 miles east of the project site.

Police Protection

Police protection for the proposed project would be provided by the County of San Diego Sheriff's Department. The County Sheriff provides contract law enforcement services to the City of San Marcos through the station located at 182 Santar Place located within City limits.

Schools

The project site is within the San Marcos Unified School District (SMUSD) boundary. SMUSD is 49 square miles in size and encompasses most of the City of San Marcos and portions of the Cities of Vista, Escondido, and Carlsbad, as well as unincorporated areas of the County of San Diego between these cities. Students generated by the project would attend La Mirada Academy (elementary and middle school) and San Marcos High School.

Parks

There are 24 community parks, 13 neighborhood parks and three recreation centers in the City. The closest park to the project site is Innovation Park. Innovation Park, located at 1151 Armorlite Drive and has a dog park, pickleball court, play equipment, permanent restrooms, and picnic tables.

Libraries

The City is served by the San Diego County Library. The San Marcos Branch is located at 2 Civic Center Drive, approximately 2.25 miles southeast of the project site.

2.2.2.7 Offsite Improvements

Water Infrastructure Improvements

The project would also construct an 8-inch water main through the project site to create a looped water main connecting Capalina Road and W. Mission Road and dedicate an easement to VWD through the project's drive aisle. A portion of this improvement would be offsite and within W. Mission Road.

Wastewater Infrastructure Improvements

Two scenarios are considered for sewer service on the project site, Scenario 1 and Scenario 2. The following offsite improvements would be required, depending on the scenario that is implemented, and would be required to be in place prior to project occupancy. These improvements would occur within already paved roadways.

Scenario 1

- Upsize approximately 1,860 feet of existing 8-inch and 10-inch sewer main within Pacific Street and Descanso Avenue with a 12-inch main (CA-4 through CA-8); and
- Upsize approximately 1,094 feet of existing 10-inch sewer main within Descanco Avenue and Las Posas Road with a 15-inch main (CA-9 through CA-14).

Scenario 2

Scenario 2 would re-route existing sewer flows from Seminole Street south to Grand Avenue, rather than north to pipes CA-7 through CA-14, located in Descanco Avenue and Las Posas Road, which were determined to have deficient capacity in Scenario 1.

Scenario 2 relies on pending VWD-Board approved improvements associated with the South Pacific Industrial project which would construct of a sewer main extension in Pacific Street between Seminole Street and Grand Avenue (pipes ALT-2 and ALT-3).

Under Scenario 2, the proposed project would:

- Construct a pipe (ALT-1) to connect the existing sewer main in Seminole Street to the new main in South Pacific Street (ALT-2 and ALT-3); and
- Sever the connection to the existing sewer main in the northern portion of Pacific Street.

Given the current deficiencies in sewer segments CA-4 through CA-14, the proposed project may also need to implement the following improvements under Scenario 2, unless VWD determines they are no longer needed based upon future modeling and coordination with the project applicant.:

- Upsize approximately 1,860 feet of existing 8-inch and 10-inch sewer main within Pacific Street and Descanso Avenue with a 12-inch main (CA-4 through CA-8); and

- Upsize approximately 1,094 feet of existing 10-inch sewer main within Descanco Avenue and Las Posas Road with a 15-inch main (CA-9 through CA-14).

The EIR assumes these improvements may still be required under Scenario 2 to provide the most conservative analysis.

Transportation Infrastructure Improvements

The proposed project would widen along the project frontage of Capalina Road to provide an additional 12 feet to accommodate a bike lane, on-street parking, a 5-foot sidewalk and a vegetated swale to handle public street runoff.

Roadway Restriping

As recommended in the Local Transportation Analysis prepared for the project (CRA 2023b), the project applicant would restripe and extend the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road by approximately 125 feet. The project would also restripe the centerline in Capalina Road to provide a two-way left turn lane. These improvement would be completed prior to project occupancy.

2.2.2.8 Project Design Features

The project incorporates the following design features and would adhere to specific regulatory requirements that would minimize potential environmental effects. These are summarized, in **Table 2-1** located at the end of this section.

Table 2-1. Project Design Features

Aesthetics • Implementation of the Landscape Plan to provide a cohesive and visually appealing planting scheme. • Compliance with the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards.
Air Quality • Compliance with SDACPD Rule 55 – Fugitive Dust. • In accordance with SDAPCD Rule 67.0 (Architectural Coatings), the project would utilize low-volatile organic compound (VOC) paint that does not exceed 100 grams of VOC per liter for interior surfaces and 150 grams of VOC per liter for exterior surfaces. • Heavy diesel construction equipment shall be rated Tier IV or better.
Geology and Soils • Implementation of all general, foundation design, concrete design, and corrosion recommendations contained within Chapters 6 of the geotechnical report prepared for the project (AGS 2022).
Greenhouse Gas Emissions • Provision of 8 Level 2 electric vehicle charging stations. • Provision of 15 EV capable and 36 EV ready parking spaces in the community parking area. • Installation of rooftop solar consistent with Title 24 and the CAP compliance checklist. • Provision of bicycle racks. • The property manager will provide transit information to the owners and make a good faith effort in offering transit fare subsidies. The property management company will provide a newsletter to inform the residents there are options for reduced transit passes.

- Designated parking for car-share, carpool, vanpool, EV and/or park-and-ride spaces on site.
- Provision of a workspace in the community building and common office space in the commercial are for telecommuting employees.
- Compliance with the City's Model Water Efficient Landscape Ordinance and Municipal Code, Title 20.
- Installation of electric (rather than natural gas) tank water heaters.
- None of the units will have fireplaces.
- Planting of shade trees.

Energy

- Ensure proper maintenance of all construction equipment per manufacturer recommendations.
- Installation of rooftop solar consistent with Title 24.

Geology and Soils

- Implement all recommendations from the preliminary geotechnical investigation (AGS 2022). These recommendations include general provisions related to the site as well as specific recommendations related to foundation design, concrete design, and corrosion. The detailed recommendations are included in Chapter 6 of the geotechnical report, which is included as Appendix G of this document.

Hazards

- Future residents shall be notified of potential annoyances commonly associated with proximity to airports (e.g., noise, vibrations, and overflights) through the recording of overflight notification documents as outlined in the McClellan-Palomar Airport Land Use Compatibility Plan and Chapter 20.265 of the City's Municipal Code.

Hydrology and Water Quality

Source control BMPs include, but are not limited to:

- Preventing illicit discharges into the MS4
- Stenciling the future on-site public road storm drain inlets
- Protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal.

Site design BMPs include, but are not limited to:

- Conserving natural drainage pathways and hydrologic features
- Conserving natural areas, soils, and vegetation
- Minimizing impervious areas
- Minimizing soil compaction
- Runoff collection through multiple private inlets
- Landscaping with native or drought tolerant species.

Post-construction BMPs include, but are not limited to:

- Biofiltration basins
- Vegetated swale
- Stormwater detention system

Noise

- Grading, excavation, and other earth moving activities would occur between 7:00 AM and 4:30 PM, Monday through Friday. No grading, excavation and other earth moving activities would occur on the weekends or holidays in accordance with the City's Municipal Code, Section 17.32.180.
- The residential units with direct line-of-site to W. Mission Road will have enhanced balcony and patio shielding consisting of 5-foot barriers The barriers will be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials.
- To ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Public Services – Fire Protection, Police Protection and Schools

- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic).
- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD98-01 (Police).
- The applicant shall pay the San Marcos Unified School District developer fees that are in effect at the time of building permit issuance. The current residential fee is $4.79 per square foot and the current commercial fee is $0.78 per square foot.

Transportation (Vehicle Miles Traveled)

- Widen the project frontage of Capalina Road to provide an additional 12 feet to accommodate a bike lane, on-street parking, a 5-foot sidewalk and a vegetated swale to handle public street runoff.
- Restripe and extend the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road by approximately 125 feet as detailed in the Local Transportation Analysis prepared for the project (CRA 2023a).
- Restripe the centerline in Capalina Road to provide a two-way left turn lane.
- Construct project driveways in accordance with City and Fire District Standards.
- Install stop signs (R1-1) at both project driveways.
- Install appropriate signage to warn drivers of pedestrian traffic.
- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD2011-01 (Congestion Management).

Utilities and Service Systems

- The applicant shall pay applicable Water and Wastewater Capital Facility Fees to Vallecitos Water District per Ordinances Nos. 175 and 176.
- Construct an 8-inch water main through the project site to create a looped water main connecting Capalina Road and W. Mission Road and dedicate an easement to VWD through the project's drive aisle.
- Construct wastewater infrastructure improvements, as detailed in either Scenario 1 or Scenario 2 of the VWD Capalina Apartments Water and Sewer Study (2023).

2.3 Environmental Setting

2.3.1 Existing Land Use and Setting

On-Site

The project site is currently undeveloped, vacant land. Per the Phase I Environmental Site Assessment prepared for the project, the project site appeared to be vacant pastureland from prior to 1939 until approximately 1974, when the northwestern perimeter of the property appeared to be vacant, rough-graded land. By 1980, the project site appeared to be vacant, rough-graded land with what appeared to be an area graded for uses as a vehicle parking area on the southeastern portion of the property. By 1996, the property appeared to be vacant, weed-abated land. By 2005, a vehicle parking area appears to be to be located on the southeastern perimeter of the subject property. By 2012, the vehicle parking area was removed and the property appeared to be vacant, weed-abated land (The Phase 1 Group 2022). The entire site is occupied with disturbed habitat with a few ornamental trees (Dudek 2023a).

Surroundings

The project area is developed with a mix of commercial and residential uses. To the east of the project site is the Crossroad Shopping retail center with various strip commercial establishments such as restaurants and salon services (MU-3 zone). To the south, on the opposite side of Capalina Road, is a church (B-P zone) and the El Dorado mobile home community (R-MHP zone). To the west is an adjacent parcel (APN 219-115-35) containing the former Mission Center Shopping Center, with various existing strip commercial establishments, a market and parking areas. A liquor store remains in operation on the site. This 1.42-acre parcel is burdened by a San Diego County Water Authority (SDCWA) easement, and additionally a 1987 reciprocal easement agreement which grants the project parcel an express easement for ingress, egress, and parking across the entirety of APN 219-115-35. The project applicant is proposing to accommodate all parking onsite and does not anticipate using this area, under the terms of the reciprocal easement agreement, as part of the project. To the north of the project site is W. Mission Road, the SPRINTER rail line, and the Inland Rail Trail. North of that is an undeveloped area zoned MU-1 and then single family residential uses (R-1-7.5 zone).

2.3.2 Existing General Plan and Zoning

Existing General Plan Land Use Designation

The project site has an existing General Plan Land Use designation of Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a maximum floor area ratio (FAR) of 1.50. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation "Provides for a variety of commercial and office uses integrated as a cohesive development. These uses may be mixed 'vertically' (on separate floors of a building) or 'horizontally' (on a single site or adjacent parcels). Structured parking, while not required to achieve the maximum FAR, may be allowed. Shared parking arrangements may also be allowed consistent with the nature of mixed uses. Typical uses include retail, commercial services, administrative and office uses, institutional and government uses, business support and financial uses, restaurants, and health care facilities. To maintain a pedestrian scale and orientation, retail and other active services are encouraged at street level. This designation does not allow residential uses. A Specific Plan is required for development" (City of San Marcos 2012).

Existing Zoning Designation

The project site has a zoning designation of MU-3 (SP). According to Section 20.225.060 of the City's Zoning Ordinance, this zone is intended to "support a job-based mixed-use area combining a variety of commercial and office uses integrated as a cohesive development. This business-oriented area shall be complementary to the MU-1 and MU-2 Zones; residential uses are not permitted in the MU-3 (SP) Zone. Typical uses include commercial retail, business services, administrative and office uses, institutional and government uses, business support and financial uses, restaurants, and health care facilities. Horizontal and vertical mixed use is permitted" (City of San Marco 2021).

2.3.3 Regional Setting

The following provides a general description of various aspects of the project's environmental setting. Additional descriptions of the project's environmental setting as it relates to environmental issue areas can be found in Chapter 3.

2.3.3.1 Climate

The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average summertime high temperature in the region is approximately 74°F, with highs approaching 76°F in August on average. The average wintertime low temperature is approximately 49°F. Precipitation in the local area is approximately 10 inches per year, with the bulk of precipitation falling between December and March.

2.3.3.2 Air Basin

The City and project site is within the San Diego Air Basin (SDAB) and is under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). The SDAB is one of 15 air basins that geographically divide the State of California. The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and it is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB is currently classified as a federal nonattainment area for ozone (O_3) and a state nonattainment area for particulate matter less than or equal to 10 microns (coarse particulate matter (PM_{10})), particulate matter less than or equal to 2.5 microns (fine particulate matter ($PM_{2.5}$)), and O_3.

2.3.3.3 Soils

The earth materials present at the site consist of surficial deposits of undocumented artificial fill and topsoil/alluvium overlying sedimentary rock assigned to the Santiago Formation. The site is geologically mapped as sitting near the boundary of the Santiago Formation and undifferentiated metasedimentary and metavolcanic rock although metasedimentary/metavolcanic rock was not encountered during the geotechnical study. The following is a brief description of the subsurface materials encountered (AGS 2022).

2.3.3.4 Terrain and Topography

The project site is located within the 7.5-minute San Marcos Quadrangle map. The site is generally flat and with elevations ranging from 580-600 feet above mean sea level (AMSL).

2.3.3.5 Watersheds and Hydrology

The project site is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into eleven hydrologic units. The project site is located in the Richland Hydrologic Subarea (904.52) within the San Marcos Hydrologic Area (904.5) of the Carlsbad Watershed (Hydrologic Unit (904). The project site discharges to a public storm drain system which flows to an un-named tributary that flows to San Marcos Creek (passing through Lake San Marcos) to Batiquitos Lagoon, which discharges to the Pacific Ocean.

2.3.3.6 Regional Biology

The City of San Marcos Subarea Habitat Conservation Plan/Natural Community Conservation Plan (NCCP) has not been finalized or implemented, and the City is no longer an active participant in the NCCP program and the subregional Multiple Habitat Conservation Program (MHCP) conservation planning effort. However, it is the City's General Plan policy to comply with the conservation policies identified in the MHCP through use of the Draft San Marcos Subarea Plan as an implementation tool. The project site is not located within a Focused Planning Area (FPA) in the City's Draft Subarea Plan.

Based upon the biological resources study prepared for the project (Dudek 2023a), the entire site is disturbed habitat. The site is regularly mowed and maintained, and is dominated by species commonly found in disturbed areas including Russian thistle (Salsola tragus), Bermuda grass (*Cynodon dactylon*), tocalote (*Centaurea melitensis*), short-pod mustard (*Hirschfeldia incana*), and various species of bromes (*Bromus sp.)* and erodium (*Erodium sp.).* There were six native species throughout the site including California encelia (*Encelia californica*), mulefat (*Baccharis salicifolia*) coyote brush (*Baccharis pilularis ssp. consanguinea*), telegraph weed (*Heterotheca grandiflora*), western ragweed (*Ambrosia psilostachya*) and gumplant (*Grindelia camporum*). Lastly, there are some non-native trees scattered throughout the site including Mexican fan palms (*Washingtonia robusta*) and Peruvian pepper tree (*Schinus molle*). Rare plant surveys were conducted in 2021 and 2023 and no rare plants were observed on the project site.

2.4 Intended Uses of EIR

The EIR was prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.), CEQA Guidelines (14 CCR 15000 et seq.).

The EIR is an informational document that provides the City's decision makers, public agencies, responsible and trustee agencies, and members of the public with information about (1) the potential for significant adverse environmental impacts that would result from the development of the proposed project, (2) possible ways to minimize any significant environmental impacts, and (3) feasible alternatives to the proposed project that would reduce or avoid significant impacts associated with the proposed project (California Public Resources Code, Section 21002.1[a]; 14 CCR 15121[a]). Responsible and trustee agencies may use the EIR to fulfill their legal authority to issue permits for the proposed project. The analysis and findings in the EIR reflect the independent judgment of the City.

Lead Agency

As defined by CEQA Guidelines Section 15367, a "Lead Agency" means the public agency which has the principal responsibility for carrying out or approving a project. The City is the lead agency for the proposed project because it would perform the entitlement processing of the proposed project. As the designated lead agency, the City has assumed responsibility for preparing the EIR, and the analysis

and findings in the EIR reflect the City's independent judgment. When deciding whether to approve the proposed project, the City will use the information in the EIR to consider potential impacts to the physical environment associated with the proposed project.

Responsible Agencies

As defined by CEQA Guidelines Section 15381, a "Responsible Agency" includes all public agencies other than the lead agency which have discretionary approval power over the project. Subsequent to certification of the Final EIR, agencies with permitting authority over all or portions of the proposed project would use the Final EIR as the basis for their evaluation of environmental effects related to the proposed project that would culminate with the approval or denial of applicable permits.

Trustee Agencies

As defined by CEQA Guidelines Section 15381, a "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. The California Department of Fish and Wildlife (CDFW) is a Trustee Agency with regard to the fish and wildlife of the state, to designate rare and endangered native plant, and to game refuges, ecological reserves, and other areas administered by the department. CDFW is a Trustee Agency for the project.

2.4.1 Scope of the EIR

For the proposed project, the City determined that a Project EIR, as defined by CEQA Guidelines, Section 15161, was required. The City made this determination based on the scope and the location of the proposed project, as well as preparation of an Initial Study in accordance with CEQA Guidelines, Section 15063 (included as Appendix B.1 to the EIR).

The EIR evaluates all subject areas listed in Appendix G to the CEQA Guidelines, with the exception of those subject areas determined not to have a potentially significant impact on the environment, as determined during preparation of the Initial Study (refer to Chapter 5 of the EIR). Chapter 3 of the EIR evaluates in detail, the following subject areas: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, cumulative impacts, and growth-inducing impacts.

As a "Project EIR," the EIR is "focused primarily on the changes in the environment that would result from the development project" (CEQA Guidelines Section 15161). In addition, as a Project EIR, the EIR examines all phases of the proposed project including planning, construction, and operation (CEQA Guidelines Section 15161). Where environmental impacts have been determined to be significant, the EIR recommends mitigation measures directed at reducing or avoiding those significant environmental impacts.

2.4.2 Notice of Preparation and Scoping

CEQA establishes mechanisms to inform the public and decision makers about the nature of the proposed project and the extent and types of impacts that the proposed project and alternatives to the proposed project would have on the environment should the proposed project or alternatives be implemented. Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) dated May 1, 2023, to interested agencies, organizations, and parties. The NOP

was also posted to the State Clearinghouse CEQANet portal. State Clearinghouse assigned a state identification number (SCH No 2023050006) to the EIR.

The NOP is intended to encourage interagency and public communication regarding the proposed action so that agencies, organizations, and individuals are afforded an opportunity to respond with specific comments and/or questions regarding the scope and content of the EIR.

A public scoping meeting was held on May 11, 2023 in the Valley of Discovery Room at San Marcos City Hall and three community members attended. The 30-day public scoping period ended on May 30, 2023. A total of nine NOP comment letters were received.

Comments received during the NOP public scoping period were considered part of the preparation of the EIR. The NOP and written comments are included in **Appendices B.2 and B.3** to the EIR. Topics raised during the NOP comment period and scoping meeting include:

- Biological Resources: biological resource inventory, impact/mitigation, MHCP alignment, cumulative effects analysis, rare plants (*brodiaea*), vegetation characterization, and nesting bird avoidance;
- Cultural and Tribal Cultural Resources: compliance with Assembly Bill 52 and Senate Bill 18;
- Hydrology/Water Quality: design of water quality features to minimize potential for mosquito breeding sources;
- Land Use: Request to change the project to a park instead of a mixed-use residential development;
- Noise: existing noise in the area from the SPRINTER, traffic, and adjacent commercial uses;
- Public Services (police): concerns regarding crime and loitering;
- Transportation (pedestrian): pedestrian connectivity (crosswalks), paths of travel from the SPRINTER station to the project area, lighting for pedestrians; and
- Transportation (vehicular): congestion at SR-78/Rancho Santa Fe ramp, cut through traffic/speeding, and parking,

Public scoping comments regarding the proposed project's potential impact on the environment have been incorporated in the analysis in the EIR in Sections 3.3 (Biological Resources), 3.4 (Cultural Resources), 3.9 (Hydrology/Water Quality), 3.10 (Land Use – level of service analysis for traffic), 3.11 (Noise), 3.13 (Public Services), 3.15 (Transportation), 3.16 (Tribal Cultural Resources), and 4.0 (Alternatives).

2.4.3 Draft EIR and Public Review

This Draft EIR was prepared under the direction and supervision of the City. The Draft EIR will be made available to members of the public, responsible agencies, and interested parties for a 45-day public review period in accordance with CEQA Guidelines, Section 15105.

Public review of the Draft EIR is intended to focus "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (14 CCR 15204). The Notice of Completion of the Draft EIR will be filed with the State Clearinghouse as required by CEQA Guidelines, Section 15085. In addition,

the Notice of Availability of the Draft EIR will be distributed pursuant to CEQA Guidelines, Section 15087.

Interested parties may provide comments on the Draft EIR in written form. The EIR and related technical appendices are available for review during the 45-day public review period at:

City of San Marcos
Development Services Department Counter
1 Civic Center Drive
San Marcos, CA 92069

The document is also available online at: https://www.san-marcos.net/departments/development-services/planning/environmental-review-sustainability/environmental-documents.

Interested agencies and members of the public may submit written comments on the adequacy of the Draft EIR to the City's Development Services Department at the address above, addressed to Chris Garcia, Senior Planner, or emailed at: cgarcia@san-marcos.net

Comments on the Draft EIR must be received by the close of business on the last day of the 45- day review period.

2.4.4 Final EIR Publication and Certification

Once the 45-day public review period has concluded, the City will review all public comments on the Draft EIR and provide a written response to all written comments pertaining to environmental issues as part of the Final EIR. The Final EIR will include all written comments received during the public review period; responses to comments; and, if applicable, edits and errata made to the Draft EIR. The City will then consider certification of the Final EIR (14 CCR 15090). If the EIR is certified, the City may consider project approval (14 CCR 15092).

When deciding whether to approve the proposed project, the City will use the information provided in the Final EIR to consider potential impacts to the physical environment. The City will also consider all written comments received on the Draft EIR during the 45-day public review period in making its decision to certify the Final EIR as complete and compliant with CEQA and in making its determination whether to approve or deny the proposed project. Environmental considerations, as well as economic and social factors, will be weighed by the City to determine the most appropriate course of action.

Prior to approving the proposed project, the City must make written findings and adopt a Statement of Overriding Considerations with respect to any significant and unavoidable environmental effect identified in the Draft EIR (14 CCR 15091, 15093). If the proposed project is approved, the City will file a Notice of Determination with the State Clearinghouse and San Diego County Clerk within five working days after project approval (14 CCR 15094.)

Subsequent to certification of the Final EIR, agencies with permitting authority over all or portions of the proposed project will use the Final EIR's evaluation of the proposed project's environmental effects in considering whether to approve or deny applicable permits.

2.5 Matrix of Project Approvals

Consistent with the City's General Plan and San Marcos Municipal Code Zoning Ordinance Title 20, the proposed project requires certain entitlements be submitted, reviewed, and approved by the City.

The requested entitlements include a General Plan Amendment, Rezone, and Site Development Plan. These entitlements, listed and described in **Table 2-2**, would govern the development of the project site.

The City will use the EIR and associated documentation in its decision to approve or deny the required discretionary permits. Other responsible and/or trustee agencies can use the EIR and supporting documentation in their decision-making process to issue additional approvals.

Table 2-2. Required Actions and Approvals

Agency	Required Action/Approval
City of San Marcos – Lead Agency	• General Plan Amendment • Rezone • Site Development Plan • Grading Plan/Permit • Public Improvement Plan/Permit • Landscape Plan/Permit • Building Permits
San Diego Regional Water Quality Control Board	National Pollutant Discharge Elimination System Construction General Permit (State Water Resources Control Board Order 2009-09-DWQ and MS4 Permit R9-2015-0001).
Vallecitos Water District	Approval for water and sewer service

2.6 Project Inconsistencies with Applicable Regional and General Plans

Throughout Chapter 3 of this EIR, the project has been evaluated in relation to the applicable goals, policies, and objectives of: the City's General Plan and San Marcos Municipal Code Zoning Ordinance Title 20 (Section 3.10, Land Use); Regional Air Quality Strategy (Section 3.2, Air Quality); San Diego Air Pollution Control District policies (Section 3.2, Air Quality); City's Climate Action Plan (Section 3.7, Greenhouse Gas Emissions); Regional Water Quality Control Board permits (Section 3.9, Hydrology and Water Quality); the Multiple Habitat Conservation Program (Section 3.3, Biological Resources); Airport Land Use Compatibility Plans (Sections 3.8, Hazards and Hazardous Materials, 3.10, Land Use, and 3.11, Noise); and various other applicable regional and local plans and policies.

2.7 List of Past, Present and Reasonably Anticipated Future Projects in the Project Area

CEQA requires an EIR to analyze cumulative impacts. Section 15355 of CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Section 15130 of the CEQA Guidelines provides guidance for analyzing significant cumulative impacts in an EIR. The discussion of cumulative impacts "need not provide as great detail as is provided for the effects attributable to the project alone," but instead is to be "be guided by standards of practicality and reasonableness" (CEQA Guidelines §15130(b)). The discussion should also focus only on significant effects resulting from the project's incremental effects and the effects of other projects. According to Section 15130(a)(1), "an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR."

Cumulative impacts can result from the combined effect of past, present, and future projects located in proximity to the project under review. Therefore, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future developments whose impacts might compound or interrelate with those of the project under review.

According to Section 15130(b)(1) of the CEQA Guidelines, a cumulative impact analysis may be conducted and presented by either of two methods:

- A list of past, present, and probable activities producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

With the exception of the impact analyses of air quality and greenhouse gas emissions, the cumulative list approach has been used in this cumulative analysis, as discussed below. The cumulative impacts of air quality and greenhouse gas emissions have been evaluated using the summary of projections method because the geographic scope of such impacts tends to be broad and area wide.

An inventory of past, present, and reasonably foreseeable future projects within the vicinity of the project site is presented in **Table 2-3.**

Table 2-3. Cumulative Projects

No.	Project	Location	Description(1)
City of San Marcos			
1	CRP III Mission, LLC	528 W. Mission Road	Redevelop existing 10.83 acre industrial park with 3 new industrial buildings.
2	El Dorado II Specific Plan	Southwest corner of Richmar Avenue and Pleasant Way	72 MFR units and 2,000 s.f. of commercial
3	Hughes SMCC	Northeast corner of Pacific Street	67,410 sf industrial building
4	Karl Strauss Brewery & Tasting Room	Northeast corner of Las Posas Road and Vallecitos Road	10,528 s.f. of commercial
5	Lab Holding	Southwest corner of Grand Avenue and Linda Vista Drive	102 MFR units, 8 live/work units and 63,641 s.f. of commercial
6	Lanikai Senior Residential	Northwest corner of E. Mission Road and Woodward Street	115 MRF units (age-restricted for 55+)
7	Lonnie Tabbaa	Southwest corner of W. Mission Road and N. Las Posas Road	Gas station, car wash, commercial drive thru and convenience store
8	Main Square	Southeast corner of San Marcos Boulevard and McMahr Road	486 MFR units and approximately 44,000 s.f. of commercial
9	Marcos Specific Plan	Grand Avenue and Linda Vista Drive	63,000 sf commercial, 7 live-work units, 102 condos

No.	Project	Location	Description(1)
10	Mariposa II/Phase 1	Richmar Avenue and Los Olivos Drive	100 MFR affordable units to replace 40 existing MFR units (net increase of 60 units)
11	Mariposa II/Phase 2	Richmar Avenue and Los Olivos Drive	96 MFR affordable units to replace 30 existing MFR units (net increase of 66 units)
12	McDonald Group	1100 W. San Marcos Boulevard (Former Sears site)	82 MFR units and 5,000 s.f. commercial
13	Mercy Hill and Marian Center	Borden Road	22,800 s.f. of institutional uses
14	Meritage Homes (Grand Vista)	West of Las Posas Road and Palm Road intersection	120 MFR units
15	Mission 316 West	Northeast corner of E. Mission Road and Woodward Street	67 MFR units
16	Murai-Sab	N. Las Posas Road	89 SFR units
17	Pacific Commercial	Northeast corner of Grand Avenue and N. Pacific Street	122-room hotel
18	Pacifica San Marcos	S. Rancho Santa Fe Road and Creek Street	31 MFR units and 4,375 s.f. commercial
19	Pacific Specific Plan	Las Posas Road and La Mirada	449 MFR units
20	Pico Investments	236 Pico Avenue	16 MFR units
21	Restaurant Row Specific Plan	1020 W. San Marcos Boulevard	202 MFR units, 10,400 s.f. commercial space, 1.5 acre park site, and street improvements
22	San Marcos Highlands	North end of N. Las Posas Road	187 SFR units and 21.68 acres passive park
23	Santa Fe Las Flores	Northwest corner of S. Santa Fe and N. Las Flores Drive	54 MFR units
24	University District Holdings	158 S. Twin Oaks Valley Road	Formation of five commercial condominium units within two approved commercial buildings
25	Villa Serena	Northwest corner of Richmar Avenue and Marcos Street	Demolish 136 MFR units and construct 148 MFR units (net increase of 12 units)
26	Woodmont Land Company	Northeast corner of Twin Oaks Valley Road and Windy Way	11,430 s.f. preschool
27	Woodward 46 Specific Plan	East side of Woodward St, north of E. Mission Road	46 MFR units

Notes: (1) SFR = Single-Family Residential, MFR= Multi-Family Residential

Figure 2-1. Regional Map

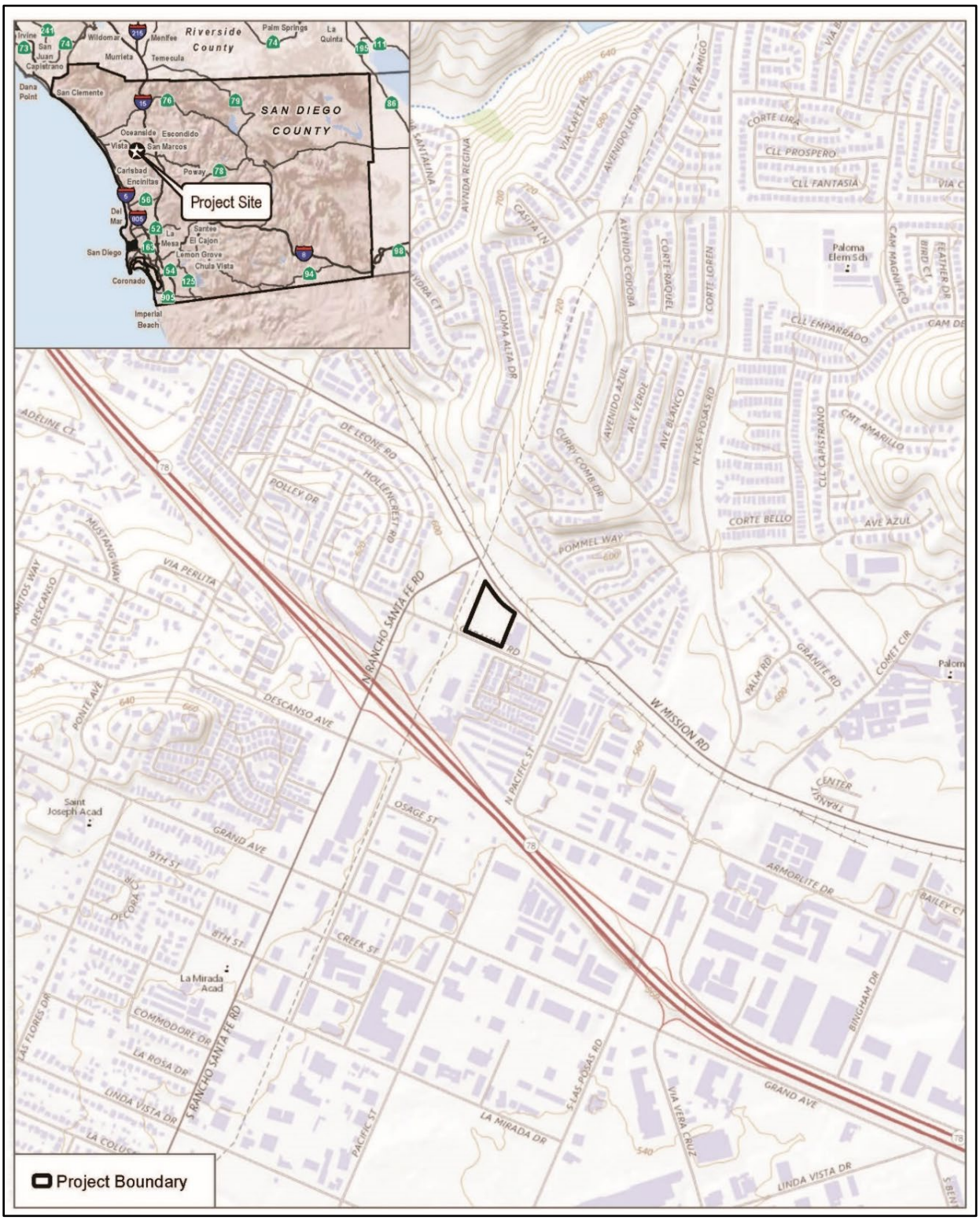


Figure 2-2. Conceptual Site Plan

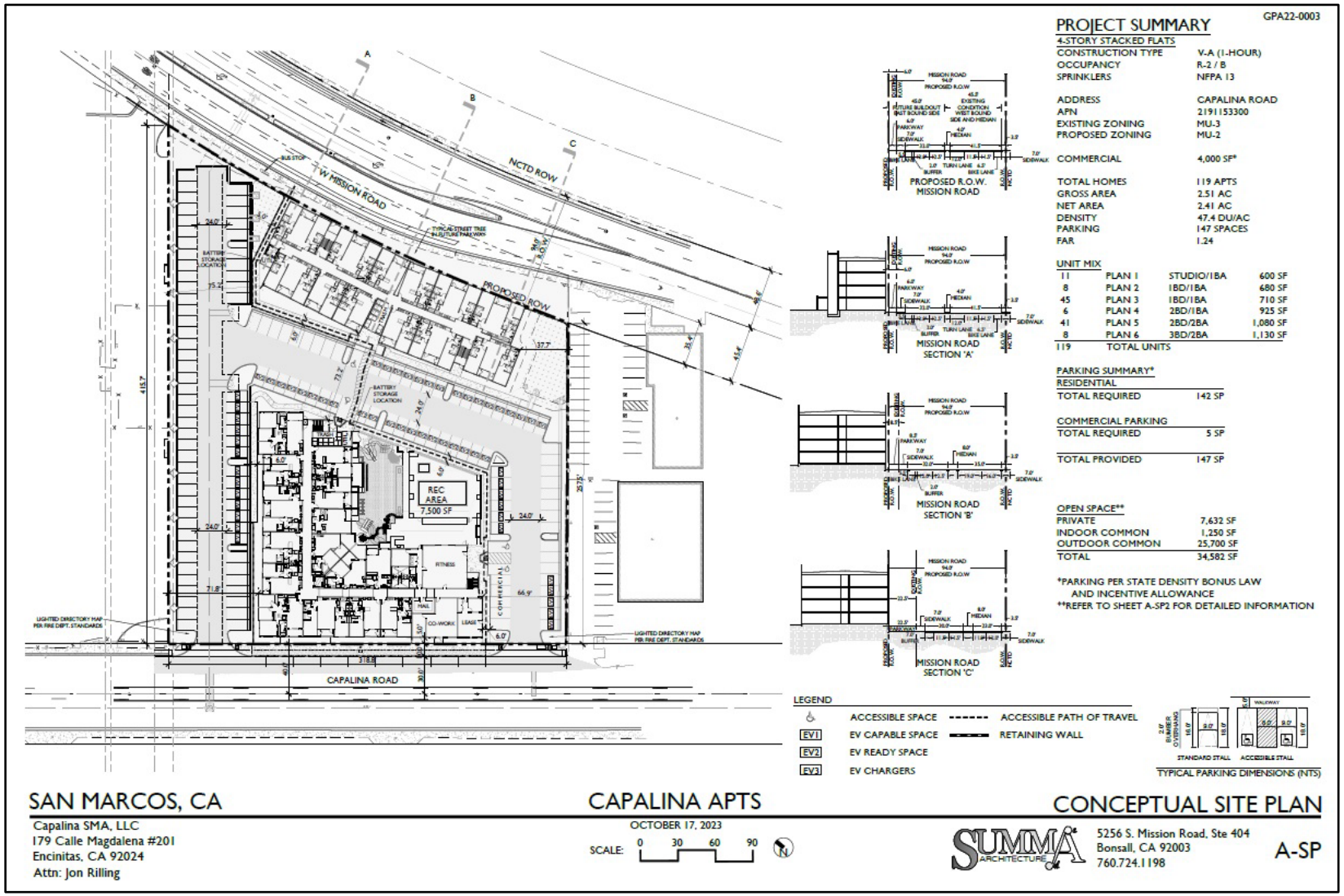


Figure 2-3. Site Plan Exhibit

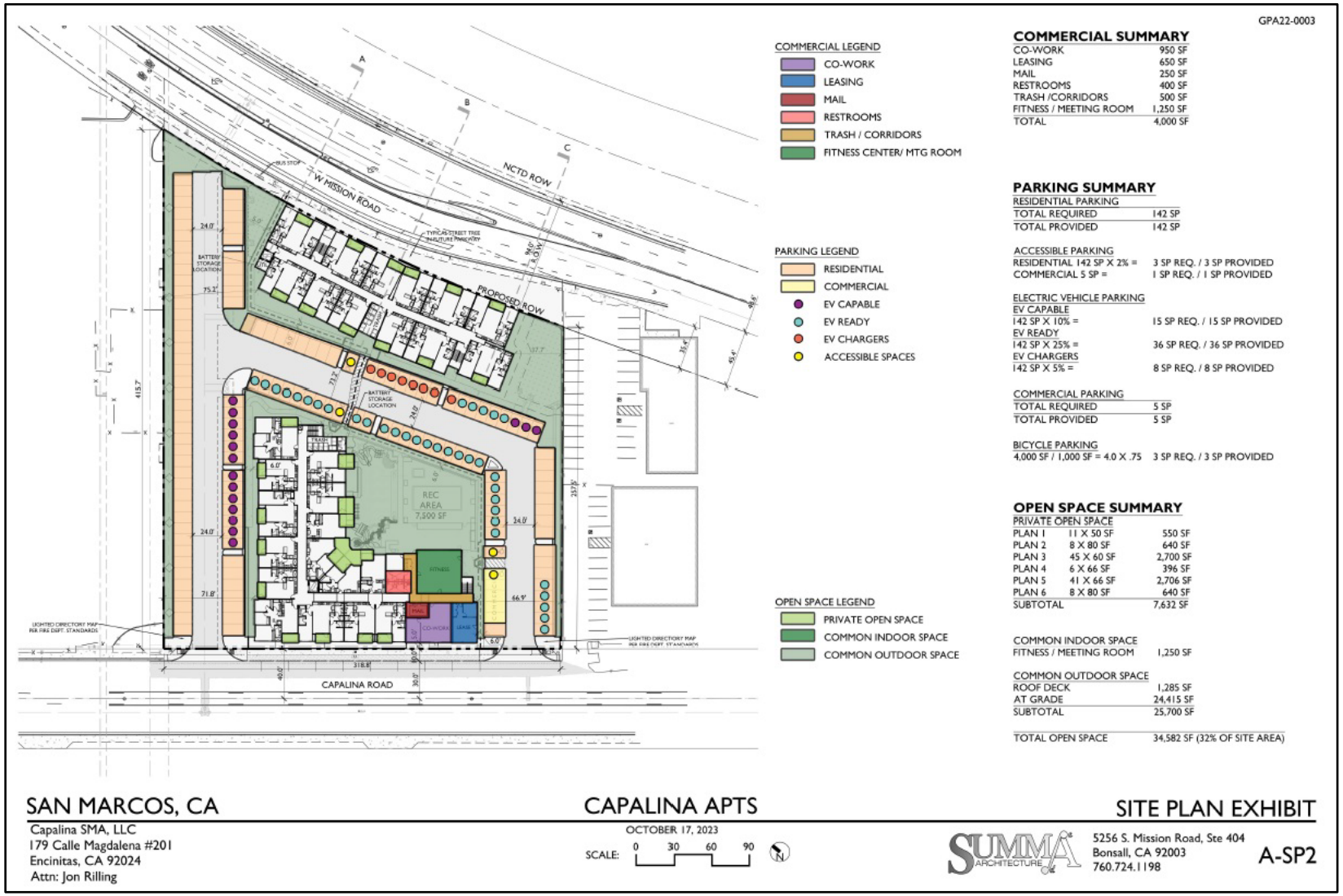


Figure 2-4. Conceptual Landscape Plan

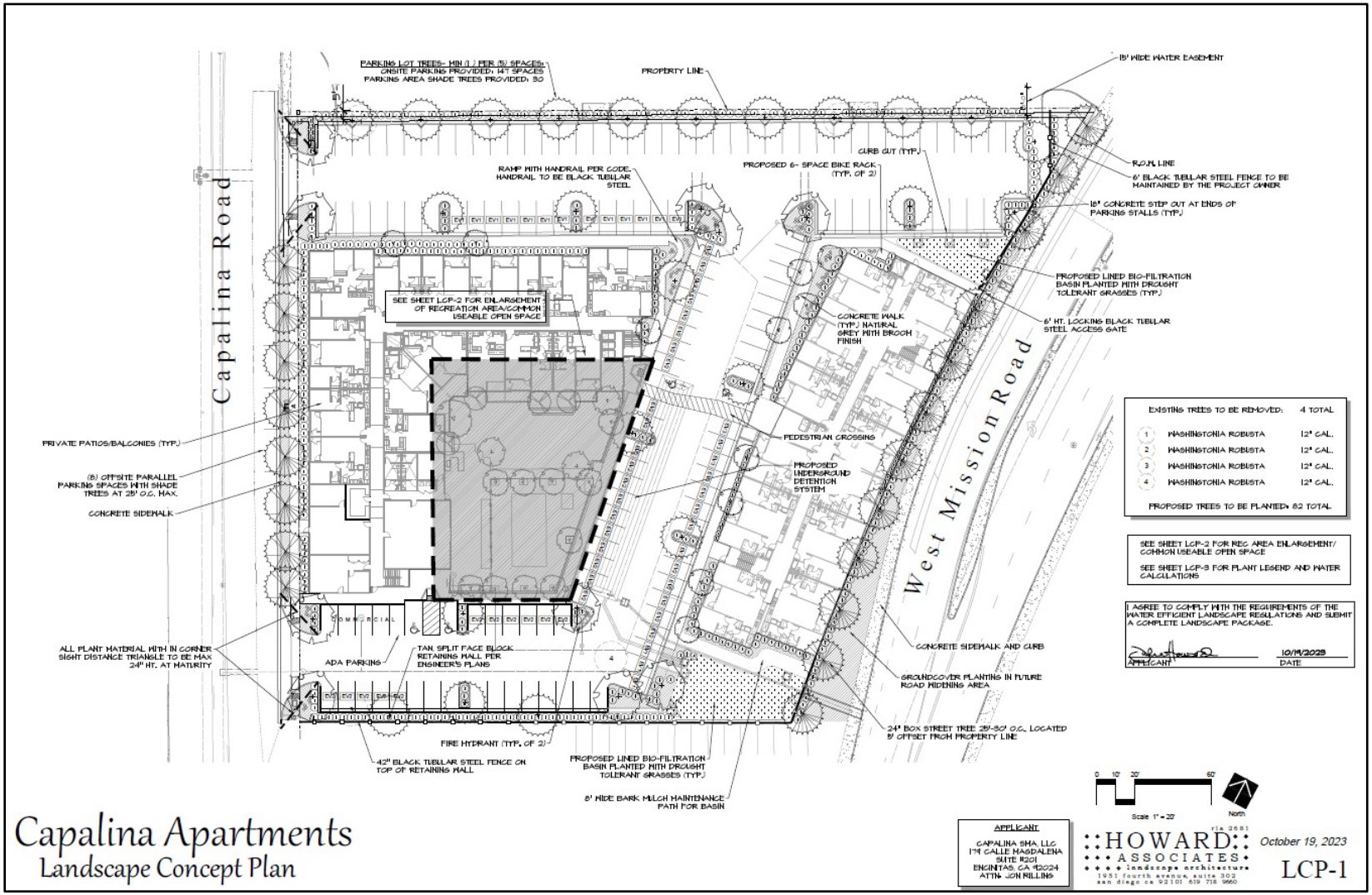


Figure 2-5a. Building A - North and West Elevations



Figure 2-5b. Building A - South and East Elevations



Figure 2-6a. Building B – North and West Elevations



Figure 2-6b. Building B – South and East Elevation



Figure 2-7. Recreation Area Rendering



3.0 Environmental Impact Analysis

Sections 3.1 through 3.17 provide the project- and cumulative-level environmental impact analysis for the proposed project.

After preparation of the Initial Study for the proposed project (Appendix B.1), it was concluded that impacts to agriculture/forestry resources, mineral resources and wildfire would be less than significant. However, it was also concluded that the following issue areas could possibly result in significant impacts: aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and services systems. Therefore, this Environmental Impact Report (EIR) evaluates the potential for impacts for these issues.

The 17 environmental topics analyzed in Sections 3.1 through 3.17 are organized as follows:

- **Introduction** – provides a brief overview of each section.
- **Existing Conditions** – describes the existing environmental conditions on the project site as it relates to the specific environmental topic being addressed in the subchapter.
- **Regulatory Setting** – describes the federal, state, regional, and local regulatory requirements applicable to the proposed project.
- **Thresholds of Significance** – describes the thresholds by which the significance of project impacts are determined. A "no impact" conclusion means the project will not have any impacts for a given threshold. A "less than significant impact" conclusion means the project may have an impact; however, the impact is not to a level that would be deemed significant per the given threshold. A "significant impact" means the project has an impact that meets or exceeds a threshold and mitigation is required to reduce the impact.
- **Project Impact Analysis** – analyzes the project-level impacts, by threshold.
- **Cumulative Impact Analysis** – analyzes the cumulative-level impacts of the project. Cumulative projects considered in this analysis are listed in Table 2-3 in Chapter 2.0, Project Description.
- **Mitigation Measures** – identifies the mitigation measures to reduce project- and/or cumulative-level impacts to below a level of significance.
- **Conclusion** – briefly summarizes the analysis of each section.

The focus of the environmental analysis in each of the following sections is the suite of proposed actions as described in Chapter 2.0, Project Description.

3.1 Aesthetics

Introduction

This section addresses the aesthetic resources of the proposed project area and the potential effects that implementation of the proposed project may have related to aesthetics, including impacts to degradation of visual character and lighting/glare. The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G, and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's website.2

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact on a scenic vista, nor would the project damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. Therefore, these issue will not be discussed further in the Environmental Impact Report (EIR). Section 5.1, Environmental Effects Found Not to be Significant – Aesthetics, of the EIR provides additional information on this topic.

Table 3.1-1 summarizes the project- and cumulative-level impact analysis for each threshold of significance.

Table 3.1-1. Aesthetics Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1 - In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant	Less Than Significant	Less Than Significant Without Mitigation
#2 - Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less Than Significant	Less Than Significant	Less Than Significant Without Mitigation

3.1.1 Existing Conditions

Visual Character

The following is a description of the existing visual characteristics and visual quality of the project site and surrounding area.

2 http://www.san-marcos.net/work/economic-development/general-plan

The City of San Marcos is in the northern portion of San Diego County. The majority of the City is located on the valley floor, with State Route 78 (SR-78) running through the center of the City. Landforms such as the mountain ranges to the north and south of San Marcos contribute to its scenic corridors.

The project site is located on the north side of Capalina Road, generally between N. Rancho Santa Fe Road and Pacific Street. The site is generally flat and with elevations ranging from 580-600 feet above mean sea level (amsl). The project site is currently undeveloped, vacant land and the entire site is characterized as disturbed habitat (Dudek 2023a). There are a few ornamental trees on the project site. **Figures 3.1-1** presents an overview of the project site and a key view map. **Figures 3.1-2 through 3.1-5** present photos of the project site viewed from offsite.

The project area is characterized as a developed, urban location with a mix of commercial and residential uses. To the east of the project site is the Crossroad Shopping retail center with various strip commercial establishments such as restaurants and salon services. To the south on the opposite side of Capalina Road is a church, a fast food establishment, a bicycle retail store, and the El Dorado mobile home community. To the west is an adjacent parcel containing the former Mission Center Shopping Center, with various existing strip commercial establishments, a market and parking areas. A liquor store remains in operation on the site. To the north of the project site is W. Mission Road, the SPRINTER rail line, and the Inland Rail Trail. North of that is an undeveloped area, with single family residential uses to the north.

Existing Light and Glare Conditions

The project site is currently undeveloped and thus does not contain any existing sources of light or glare. Additionally, the project site does not contain any reflective surfaces that would function as sources for glare. The project vicinity contains sources of nighttime lighting typical of commercial and residential uses. The project site is adjacent to developed areas and typical lighting sources in the project vicinity would include outdoor lighting fixtures on structures, in parking areas, and street lights on poles. Additionally, the project site is adjacent to W. Mission Road and vehicular headlights are visible at night. There are no sources of substantial glare present in this area.

3.1.2 Regulatory Setting

This section describes the local regulations related to aesthetics that are applicable to the proposed project.

Local

San Marcos General Plan – Conservation and Open Space Element

The following goal and policies from the City of San Marcos General Plan, Conservation and Open Space Element pertain to aesthetics and visual quality:

- Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.
    - Policy COS-3.1: Preserve scenic resources, including prominent landforms such as Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas through conservation and management policies.

- Policy COS-3.2: Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the hillsides, ridgelines, canyons, and view corridors that comprise the visual character in San Marcos.
- Policy COS-3.3: Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.
- Policy COS-3.4: Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with all the applicable goals and policies.

San Marcos Municipal Code and Zoning Ordinance. Title 20

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The San Marcos Municipal Code Zoning Ordinance Title 20 is the primary implementation tool for the policies of the General Plan. The Zoning Ordinance provides more detailed direction related to design and development standards; permitted, conditionally permitted, and prohibited uses; and other regulations such as lighting and sign regulations. The land uses specified in the Zoning Ordinance are based upon and consistent with the land use policies set forth in the General Plan. Specifically, building design, setbacks, lighting, and signage standards as well as open space requirements for development to protect open space and ambient light levels in the city. The lighting standards of the Ordinance require energy-efficient lighting that limits light and glare for private projects, with exceptions for specialized streetscape lighting. Private developments are required to submit lighting plans to ensure consistency with dark sky needs of the region (City of San Marcos 2023a).

Title 20, Section 20.300.080, Site Planning and General Development Standards

The City of San Marcos Street Lighting Standards and Specifications describes the lighting and glare standards for the city. These standards require lighting to be directed downward and limit the type and spacing of lighting to maintain reasonable lighting levels that do not contribute to light pollution. The City uses International Dark Sky Association thresholds to inform its own testing, leading to a policy that allows for the use of energy-efficient lighting sources that include, but are not limited to, light-emitting diode (LED) and induction lighting technologies (City of San Marcos 2023b).

Title 20, Chapter 20.260, Ridgeline Protection and Management Overlay Zone

The City of San Marcos adopted a Ridgeline Protection and Management Overlay Zone in November 2008, set forth in Ordinance 2008-1314, to minimize visual impacts to important ridgelines. These guiding principles are in place to protect natural viewsheds, minimize physical impacts to ridgelines, and establish innovative site and architectural design standards. The Ordinance identifies primary and secondary ridgelines within the City, plus buffer zones, and Ridgeline Overlay Zones (ROZ), surrounding these ridgelines (City of San Marcos 2023b). No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.35 miles northwest of the project site.

3.1.3 Thresholds of Significance

According to Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, visual quality and aesthetics impacts are considered potentially significant if the project would:

- **Threshold #1:** In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.
- **Threshold #2:** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.4 Project Impact Analysis

Construction

Project construction involves grading and site preparation activities to prepare the site for future buildings and infrastructure improvements. Construction could require staging areas with construction equipment and supplies, and portable trailers to serve as temporary office space or storage. Grading on the site would change or alter the existing topography on the project site to prepare the site for development. The project plans are included in Appendix A.2.

Operations

The project proposes 119 multi-family residential units and 4,000 s.f. of commercial floor area on 2.51 acres. The conceptual site plan is included as Figure 2-3 in Chapter 2. The residential units would be spread across two buildings identified as Building A and Building B. Building A is an L-shaped building fronting Capalina Road that would be four stories in height and have a maximum height of 56 feet. Building B is a rectangular-shaped building fronting W. Mission Road. Building B would also be four stories and have a maximum height of approximately 51 feet.

The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. The landscape concept plan is included as Figure 2-4 in Chapter 2. Proposed tree species include the following: Marina strawberry tree, Chinese flame tree, African sumac, Brisbane box, true green elm, crape myrtle, sweetshade, sweet bay, shrubby yew podocarpus, Carolina laurel, tipu tree, and pink trumpet tree. The proposed project would also comply with the City's Model Water Efficient Landscape Ordinance and Municipal Code, Title 20.

Overall, the project proposes 11 studio/one bath units (600 s.f.), 53 one bedroom/one bath units (ranging from 680 s.f. to 710 s.f.), 6 two bedroom/one bath units (925 s.f.), 41 two bedroom/two bath units (1,080 s.f.) and 8 three bedroom/2 bath units (1,130 s.f.). The proposed materials include stucco walls, composite shingle roof material, resawn wood fascia, trim detailing, and metal railing. Elevations for Building A are presented in Figures 2-5a and 2-5b. Elevations for Building B are presented in Figures 2-6a through 2-c. The proposed recreation area is presented in Figure 2-7.

Threshold #1: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The City of San Marcos (which includes the project site) is considered an urbanized area per the Public Resources Code (PRC). Per PRC Section 21071, an "urbanized area" is defined as "(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." As of July 1, 2022, the US Census Bureau (USCB) estimated the population of San Marcos to be 94,854 persons (USCB 2023). While this is less than 100,000 persons, the City of San Marcos is contiguous with the City of Escondido, which has an estimated population of 151,074 persons as of July 1, 2022 (USCB 2019). The combined estimated population of these two contiguous cities is 245,928 persons, which is well over the 100,000 persons threshold. Thus, the City would be considered an urbanized area per CEQA. Therefore, the first question of this aesthetics threshold does not apply to the proposed project, as it is directed at non-urbanized areas.

The second part of this threshold is for projects in urbanized areas, which applies to the project. A significant impact would occur if the project conflicts with the applicable zoning and other regulations that govern scenic quality. Scenic quality is a measure of the visual appeal of the landscape, which is subjective and varies.

The project site is currently zoned Mixed Use 3 (MU-3 (SP)) and includes a rezone request to change the zoning to Mixed Use 2 (MU-2). The project has been designed to meet the development standards of the MU-2 zone, with the exception of the minimum floor area ratio (FAR) and the minimum setback requirements. California's Density Bonus Law (Government Code Section 65915) provides for additional density as well as incentives and waivers for qualifying projects. The project applicant is requesting a waiver for the reduced FAR and the setback. The project FAR would be 1.24 compared to the 1.75 minimum FAR identified in the MU-2 Development Standards (Table 20.225-2 of the Municipal Code). The building setback along W. Mission Road would be 0 feet. This reduced setback is based upon the City's request for additional right-of-way along W. Mission Road. The building placement was shifted south, and the setback from W. Mission Road was reduced to 0 feet. The exceptions are allowed with the requested waivers. The project meets all other aspects of the MU-2 Development Standards including the City's commercial parking ratio through the allocation of an incentive, as provided under the State Density Bonus law.

The City of San Marcos adopted a Ridgeline Protection and Management Overlay Zone in November 2008, set forth in Ordinance 2008-1314, to minimize visual impacts to important ridgelines. These guiding principles are in place to protect natural viewsheds, minimize physical impacts to ridgelines, and establish innovative site and architectural design standards. The Ordinance identifies primary and secondary ridgelines within the City, plus buffer zones, or ROZ surrounding these ridgelines (City of San Marcos 2023b).

No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.35 miles northwest of the project site. The project would not result in any visual impact to primary and secondary ridgelines. Therefore, the project would

not conflict with the ordinance. Additionally, there is a general lack of public vantage points in the project vicinity.

The project's consistency with goals and policies related to scenic views and aesthetics is presented in Table 3.10-7 in Section 3.10, Land Use and Planning. No conflicts were identified.

The project design incorporates architectural treatments and design to break up the bulk and scale of the proposed buildings. This includes building articulation and setbacks with varied rooflines. The proposed landscaping plan would further enhance the project site through implementation of a comprehensive and aesthetically pleasing landscape design, which would be maintained by the project owner. The landscape plan is included as Appendix A2 of the EIR. With approval of the requested waivers, the project would not conflict with applicable zoning and other regulations governing scenic quality and impacts would be **less than significant**.

Threshold #2: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Exterior lighting proposed for the project shall be guided by the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards. These standards require downward-directed LED lighting, with the exception of specialized streetscape lighting or architectural detail lighting, which aid in the preservation of dark-sky conditions that are needed by the local observatories. The location, type, and direction of the lighting would be reviewed during the Improvement Plan review to ensure compliance with City requirements.

Lighting in the project vicinity is associated with roadway lighting along W. Mission Road and lighting associated with existing commercial and residential uses in the area and immediately adjacent to the project site. Development of the proposed project would introduce permanent lighting to a site that is currently undeveloped and does not have lighting.

Excessive, poorly designed, or unshielded lighting can be detrimental to astronomical observations. Two observatories are located in San Diego County: Palomar Observatory, located over 20 miles northeast of the proposed project site, and Mount Laguna Observatory - located approximately 50 miles southeast of the proposed project site.

The project's lighting plan is included in Figure 2-7 in Chapter 2. As proposed, the project's exterior lighting would include street and parking area lighting on 18-foot poles, wall pack lighting, pedestrian-scale lighting, and wall sconces. All lighting proposed for the project would be energy efficient, architecturally appropriate fixtures designed to minimize glare, conflict, and light pollution, while providing illumination levels that create a safe environment for both vehicles and pedestrians. To achieve these goals, all areas of the community would be aptly lit to coincide with their relevant use and activities. Street area lights would be fully cut-off fixtures and would utilize building-side shields to reduce light trespass and prevent light pollution. Common area lighting within the project would be used to enhance and complement the character of the development. Lighting would need to be varied and appropriate for each use within the common areas of the development.

The project does not propose features that would be characterized as creating a new source of glare that would adversely affect daytime or nighttime views in the area. The proposed materials include stucco walls, composite shingle roof material, resawn wood fascia, trim detailing, and metal railing. components would be neutral in color. The roof and wall colors and materials are not reflective and would not create significant sources of glare.

Since the project would be required to comply with the lighting standards set forth by the City, all lighting would be shielded to minimize light scatter and maintain dark sky conditions, and the proposed materials to be used in the homes are not glare-inducing, the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Impacts would be **less than significant**.

3.1.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projects contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect.

Projects contributing to a cumulative aesthetic impact include those within the project viewshed. The viewshed encompasses the geographic area within which the viewer is most likely to observe the proposed project and surrounding uses. Typically, this is delineated based on topography, as elevated vantage points, such as scenic vistas, offer unobstructed views of expansive visible landscapes.

From Owen's Peak and "P" Mountain, the closest primary ridgelines to the project site, viewers may be able to see cumulative projects in the same viewshed, and potentially portions of the project site. The proposed buildings would be four stories and have a maximum height of approximately 56 feet. There is existing development in the project vicinity and the project would not substantially contrast with the visual patterns of the area. The project would appear as an extension of the already urbanized landscape. When the proposed project is considered with other cumulative projects in the same viewshed, cumulatively, the increase in development would blend in with the existing urban landscape and would not result in a significant visual impact. Therefore, the proposed project would not substantially contribute to a cumulative change in the visual character of the surrounding area.

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Currently, the project site does not have night lighting since it is undeveloped. Lighting in the project vicinity is associated with roadway lighting along W. Mission Road and lighting associated with existing commercial and residential uses in the area and immediately adjacent to the project site. As described in Section 3.1.4, the project would introduce new lighting sources at the project site; however, these fixtures would be shielded to minimize light scatter and maintain dark sky conditions and would be required to comply with the lighting standards set forth by the City. Cumulative projects would also be required to adhere to the lighting standards of the jurisdictions in which they are located. When the proposed project is considered with other cumulative project adding night lighting, the impact would be less than significant due to the compliance with lighting standards set forth in the City that minimize light scatter and maintain dark sky conditions. Therefore, the project would not have a considerable contribution to sky glow such that a new significant cumulative sky glow impact would occur. Cumulative impacts would be **less than significant**.

3.1.6 Mitigation Measures

Based upon the analysis in section 3.1.4 and 3.1.5, aesthetics impacts would be less than significant and no mitigation measures are required.

3.1.7 Conclusion

The project site is in an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality, including the scenic resource protection policies in the Conservation and Open Space Element of the City's General Plan (refer to Section 3.10, Land Use and Planning). Implementation of the proposed project would reasonably result in changes to the visual character of the site by allowing a mixed-use residential development; however, impacts would be minimal due to a general lack of public vantage points and the developed nature of the project vicinity. Landscaping associated with the project would also soften views of the project site from adjacent uses.

Lighting and glare impacts were also determined to be less than significant, as the future multi-family buildings would not include highly reflective finishes or excessive lighting. Further, exterior lighting proposed for the project would comply with the City of San Marcos Street Lighting Standards and Specifications and the San Marcos Municipal Code. Cumulative impacts were determined to be less than significant. Therefore, aesthetic impacts are concluded to be **less than significant**.

Figure 3.1-1. Site Photos Key Views



Figure 3.1-2. View 1 – From the South



Figure 3.1-3. View 2 - From the West

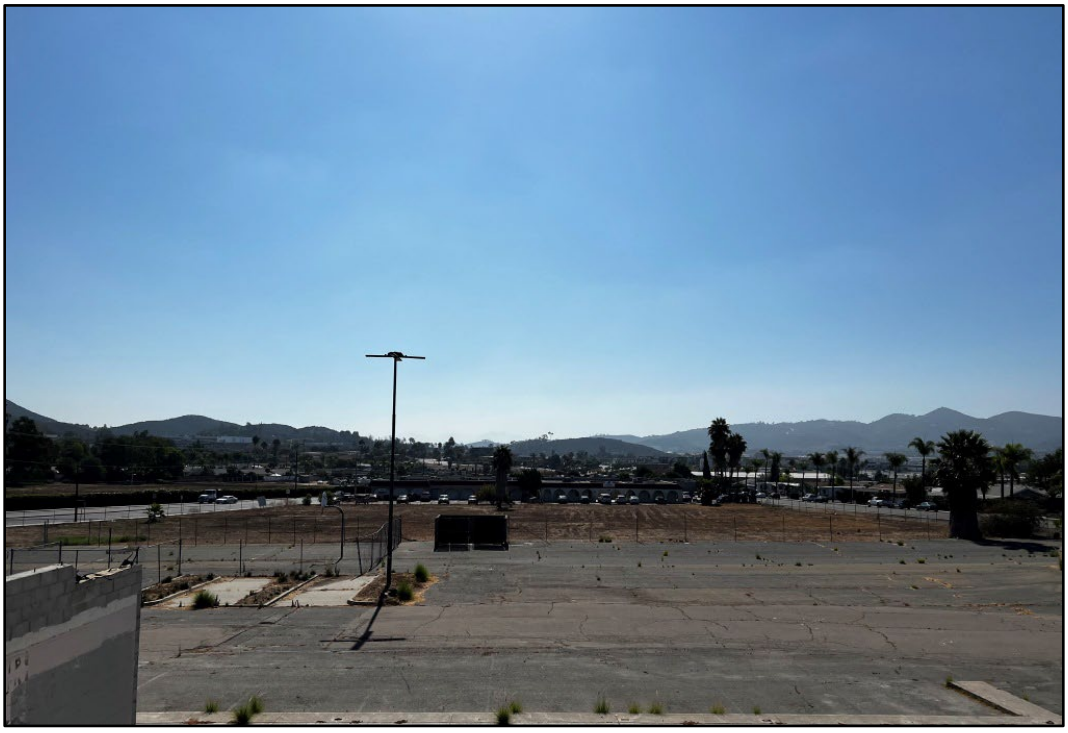


Figure 3.1-4. View 3 - From the North



Figure 3.1-5. View 4 - From the East



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3.2 Air Quality

Introduction

This section identifies, describes, and evaluates air quality issues associated with the proposed project. This section analyzes short-term construction impacts and long-term operational impacts to air quality and determines whether the project would result in a significant air quality impact. This section is based upon the following report, which is included as **Appendix C** of the Environmental Impact Report (EIR)3:

Air Quality Assessment, Capalina Apartments Residential Development Project, prepared by LDN Consulting, June 19, 2023 (LDN 2023a).

Table 3.2-1 summarizes the project- and cumulative-level air quality impacts, by threshold.

Table 3.2-1. Air Quality Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1 - Conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4 – Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.2.1 Existing Conditions

This section introduces the meteorologic/climate conditions for the project area and presents the current physical setting and pollutant levels in the proximity of the proposed project.

Meteorology/Climate

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heats up. Most of southern California is dominated by high-pressure systems for

[3] Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high-pressure systems drop to the south and brings cooler, moister weather from the north.

Meteorological trends within the City of San Marcos produce daytime highs typically ranging between 64°F in the winter to approximately 88°F in the summer with August usually being the hottest month. Daytime Low temperatures range from approximately 37°F in the winter to approximately 59°F in the summer. Precipitation is generally about 16.2 inches per year. Prevailing wind patterns for the area vary during any given month during the year and vary depending on the time of day or night. The predominant pattern though throughout the year is usually from the west or westerly (LDN 2023a).

Baseline Air Quality

Regional

The project site is located in the land use jurisdictions of the City of San Marcos (City) within the County of San Diego, within the northwestern coastal portion of the SDAB under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). The SDAB is one of 15 air basins that geographically divide the State of California.

Project area air quality can best be characterized from ambient measurements made by the SDAPCD. SDAPCD operates a network of ambient air monitoring stations throughout San Diego County, which measure ambient concentrations of pollutants and determine whether the ambient air quality meets national and state air quality standards. Pursuant to the 1990 Clean Air Act amendments, U.S. Environmental Protection Agency (USEPA) classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. As explained further below, these standards are set by USEPA or the California Air Resources Board (CARB) for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, calls for the designation of areas as "attainment" or "nonattainment," but based on the California Ambient Air Quality Standards (CAAQS) rather than the NAAQS.

Current attainment designations for the SDAB are presented in **Table 3.2-2.** As shown, the SDAB currently exhibits a non-attainment status for the federal 8-hour standard for ozone (O_3). Additionally, the SDAB is either in attainment or unclassified for federal standards of 1-hour O_3, carbon monoxide (CO), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). The SDAB is also in attainment of state air quality standards for all pollutants except for O_3, PM_{10}, and $PM_{2.5}$. An attainment plan is available for O_3.

Table 3.2-2. San Diego County Air Basin Attainment Status by Pollutant

Criteria Pollutant	Federal Designation	State Designation
Ozone (O_3) – 8-hour	Nonattainment	Nonattainment
Ozone (O_3) – 1-hour	Attainment	Nonattainment(1)
Carbon Monoxide (CO)	Attainment	Attainment
Respirable Particulate Matter (PM_{10})	Unclassifiable(2)	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Attainment	Nonattainment(3)
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified

Source: SDAPCD 2023.

Notes: (1) The federal 1-hour standard of 12 parts per hundred million (pphm) was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

(2) At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

(3) The California Air Resources Board (CARB) has not reclassified the region to attainment yet due to (1) incomplete data, and (2) the use of non-California Approved Samplers (CAS). While data collected does meet the requirements for designation of attainment with federal $PM_{2.5}$ standards, the data completeness requirements for state $PM_{2.5}$ standards substantially exceed federal requirements and mandates and have historically not been feasible for most air districts to adhere to given local resources. SDAPCD has begun replacing most regional filter-based $PM_{2.5}$ monitors as they reach the end of their useful life with continuous $PM_{2.5}$ air monitors to ensure collected data meets stringent completeness requirements in the future. SDAPCD anticipates these new monitors will be approved as "CAS" monitors once CARB reviews the list of approved monitors, which has not been updated since 2013.

Local

The SDAPCD air quality monitoring stations located in Carmel Mountain Ranch and Camp Pendleton are the closest stations to the project area. **Table 3.2-3** summarizes the two most recent years of monitoring data from the Carmel Mountain Ranch and Camp Pendleton monitoring stations.

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, as identified by CARB, include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The immediate project vicinity is developed primarily with commercial uses. The site is bounded by West Mission Road to the north, and by Capalina Road to the south. Existing commercial and retail uses are located on the west, east, and south of the site. The El Dorado Park mobile home community is located across the street from the project site on the south side of Capalina Road. There are also existing single-family residential uses north of West Mission Road, and west of N Rancho Santa Fe Rd.

Table 3.2-3. Two Year Ambient Air Quality Summary Near the Project Site (Camp Pendleton or Carmel Mountain Ranch Stations)

Pollutant[1]	Averaging Time	CAAQS	NAAQS	2021	2022	Days Exceeded Over 2 Years
O_3 (ppm)	1 hour	0.09 ppm	No Standard	0.07	0.08	0
	8 hour	0.070 ppm	0.070 ppm	0.06	0.07	0
PM_{10} ($\mu g/m^3$[3])	24 hour	50 µg/m3	150 µg/m3	PM_{10} Data Not Available for Monitoring Sites near Project Site.		
	Annual[2]	20 µg/m3	No Standard			
$PM_{2.5}$[3] (µg/m3)	24 hour	No Standard	35 µg/m3	23.5	14.9	N/A
	Annual[2]	12 µg/m3	15 µg/m3	8.5	7.6	N/A
NO_2 (ppm)	Annual[2]	0.030 ppm	0.053 ppm	0.013	0.013	N/A
	1 hour	0.18 ppm	0.100 ppm	0.059	0.059	N/A
CO[2] (ppm)	1 hour	20 ppm	35 ppm	3.0	2.2	N/A
	8 hour	9 ppm	9 ppm	1.8	1.2	N/A

Source: LDN 2023a.

Notes: (1) SO_2 is only monitored at the El Cajon Monitoring Station. Within the entire County of San Diego, SO2 emissions within the County are essentially Zero for all metrics including the Average, Maximum 24 hour and mph 1-hour standards. The highest 1-hr measurement identified is 0.004 ppm and the most restrictive standard (CAAQS for SO_2) is 0.25 ppm.
(2) Annual arithmetic mean
(3) Data was collected from Carmel Mountain Ranch station which began in 2019. All other data presented was collected at the Camp Pendleton Monitoring Station.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. The criteria air pollutants that are monitored by the USEPA are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than or equal to 10 microns or 2.5 microns in diameter (PM_{10}, and $PM_{2.5}$) sulfur dioxide (SO_2), and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed in the following text. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. Examples of sources and effects of these pollutants are identified below:

Ozone (O_3): A strong smelling, pale blue reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy. O_3 exists in the upper atmosphere O_3 layer, as well as at the earth's surface. O_3 at the earth's surface causes numerous adverse health effects, including lung inflammation, tissue damage, and impaired lung functioning, is a major component of smog, and can damage materials such as rubber, fabrics, and plastics.

It should be noted that Oxides of Nitrogen (NO_x) is a family of poisonous, highly reactive gases. These gases form when fuel is burned at high temperatures. NO_x pollution is emitted by automobiles, trucks, and various non-road vehicles (e.g., construction equipment, boats, etc.) as well as industrial sources such as power plants, industrial boilers, cement kilns, and turbines. NO_x often appears as a browning gas. It is a strong oxidizing agent and plays a major role in the atmospheric reactions with Volatile Organic Compounds (VOCs) which produce ozone on hot summer days (LDN 2023a).

Carbon Monoxide (CO): Carbon monoxide is a colorless, odorless, tasteless, and toxic gas resulting from the incomplete combustion of fossil fuels. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous adverse health effects including fatigue, headaches, confusion, and dizziness.

Nitrogen Dioxide (NO_2): NO_2 is formed when nitrogen (N_2) combines with oxygen (O_2). Its life span in the atmosphere ranges from one to seven days. NO_2 is typically created during combustion processes and is a major contributor to smog formation and acid deposition. NO_2 may result in numerous adverse health effects, including respiratory damage. It absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility.

Particulate Matter Less Than or Equal to 10 Microns in Diameter (PM_{10}): A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (equal to 10 microns or smaller, about 0.0004 inch or less in diameter) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects, including allergies, asthma, and respiratory illness. PM_{10} also causes visibility reduction.

Particulate Matter Less Than or Equal to 2.5 Microns in Diameter ($PM_{2.5}$): A similar air pollutant consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which are often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO_2 released from power plants and industrial facilities and nitrates that are formed from NO_x released from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles depends mostly on location of the emissions, time of year, and weather conditions. The adverse health effects of $PM_{2.5}$ are similar to those of PM_{10}.

Sulfur Dioxide (SO_2): Typically, strong smelling, colorless gas that is formed by the combustion of fossil fuels. SO_2 and other sulfur oxides contribute to the problem of acid deposition as well as adverse health effects including respiratory constriction and, with continued exposure, increased incidents of pulmonary symptoms.

Lead (Pb): Lead in the atmosphere occurs as particulate matter. Lead has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the greatest amount of lead emissions. Lead has the potential to accumulate over time and cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

Visibility Reducing Particles: These are particles in the air that obstruct visibility.

Sulfates: Sulfates are salts of Sulfuric Acid and occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. The increase the acidity of the atmosphere and form acid rain.

Hydrogen Sulfide (H_2S): A colorless, toxic, and flammable gas with a recognizable smell of rotten eggs or flatulence, H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs.

Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of H_2S (greater than 500 parts per million) can cause a loss of consciousness and possibly death.

Vinyl Chloride: Also known as chloroethene, vinyl chloride is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).

Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by several sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

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

3.2.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to air quality, including federal, state, and local guidelines.

Federal

Federal Clean Air Act

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency is responsible for implementing most aspects of the Clean Air Act, including setting National ambient air quality standards (NAAQS) for major air pollutants, setting hazardous air pollutant standards, approving state attainment plans, setting motor vehicle emission standards, issuing stationary source emission standards and permits, and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the criteria pollutants O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead and shown in **Table 3.2-4.**

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS for CO, Lead and those based on annual averages or arithmetic mean are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the USEPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames. These plans must include pollution control means that demonstrate how the standards will be met as expeditiously as possible. The NAAQS were amended in July 1997 to include an additional standard for O_3, and to adopt a standard for fine particulates ($PM_{2.5}$). In June 2002, a stringent statewide $PM_{2.5}$ standard was adopted. In 2012, the $PM_{2.5}$ standard was lowered further based on air quality monitoring data.

Table 3.2-4. Ambient Air Quality Standards

Pollutant	Average Time	California Standards(1)		National Standards(2)		
		Concentration(3)	Method(4)	Primary(3)(5)	Secondary (3)(6)	Measurement Method(7)
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m3)	Ultraviolet Photometry		Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		35 µg/m3		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3				
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard				Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)				

Pollutant	Average Time	California Standards(1)		National Standards(2)		
		Concentration(3)	Method(4)	Primary(3)(5)	Secondary (3)(6)	Measurement Method(7)
Nitrogen Dioxide (NO_2) (10)	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemilumi-nescence	0.053 ppm (100 µg/m3) (8)	Same as Primary Standard	Gas Phase Chemilumi-nescence
	1 Hour	0.18 ppm (339 µg/m3)		0.100 ppm(8) (188/ µg/m3)	-	
Sulfur Dioxide (SO2) (11)	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm(10) (for Certain Areas)	-	Ultraviolet Fluorescence; Spectropho-tometry (Pararoo-saniline Method)9
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm(10) (for Certain Areas) (See Footnote 9)	-	
	3 Hour			-	0.5 ppm (1300 µg/m3)	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m3)	-	
Lead(12) (13)	30 Day Average	1.5 µg/m3	Atomic Absorption	-		-
	Calendar Quarter	-		1.5 µg/m3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	-		0.15 µg/m3		
Visibility Reducing Particles	8 Hour	See footnote 13		No National Standards		
Sulfates	24 Hour	25 µg/m3	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride(12)	24 Hour	0.01 ppm (26 µg/m3)	Gas Chroma-tography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, 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 PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, 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 procedure which can be shown to the satisfaction of the ARB 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.

Pollutant	Average Time	California Standards(1)		National Standards(2)		
		Concentration(3)	Method(4)	Primary(3)(5)	Secondary (3)(6)	Measurement Method(7)

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 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 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 PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3 . The existing national 24- hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3 , as was the annual secondary standard of 15 µg/m3 . The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 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 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 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 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
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/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
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, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf
ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter
mg/m^3= milligrams per cubic meter

National Ambient Air Quality Standards (NAAQS)

To gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. Primary standards set limits for the protection of public health, including those people most susceptible to further respiratory distress such as asthmatics, children, and the elderly, or sensitive receptors. Secondary standards set limits to protect public welfare and include protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Research has shown that chronic exposure to O_3 at levels that just marginally meet clean air standards may nevertheless have adverse health effects. State and federal agencies, therefore, have promulgated a more stringent 8-hour O_3 standard that better reflects human health response to more chronic exposure, shown in Table 3.2-4. U.S. EPA set the 2008 ozone standard to 75 parts per billion (ppb) and required all areas of the country to meet this monitored concentration by July 20, 2018. The areas that were not able to demonstrate compliance with this standard have now been classified as an ozone nonattainment area. U.S. EPA revised the standard to 70 ppb in 2015

but some areas, including San Diego County, have still not met the 2008 standard and their attainment status changed in level of severity.

State

California Ambient Air Quality Standards (CAAQS)

In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

The CARB has established California ambient air quality standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. Additionally, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants in California. The CAAQS currently in effect in California are also shown in Table 3.2-4 and include the most recently adopted federal standards for chronic (8-hour) O_3 exposure and for ultra-small diameter particulate matter of 2.5 microns or less in diameter ($PM_{2.5}$). CAAQS restrict four additional contaminants: visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Current attainment designations for the SDAPCD are presented in Table 3.2-2.

California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practical date. Air pollution from commercial and industrial facilities is regulated by local air quality management districts, whereas mobile sources of air pollution are regulated by the California Air Resources Board (CARB) and the USEPA. All air pollution control districts have been formally designated as "attainment" or "nonattainment" for each state air quality standard, as shown in Table 3.2-2. Areas in California where ambient air concentrations of pollutants are higher than the state standard are considered to be in "non-attainment" status for that pollutant. If there are inadequate or inconclusive data to make a definitive attainment designation, districts are considered "unclassified."

Local

San Diego Air Pollution Control District

Although CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project is located within the SDAB and is subject to SDAPCD guidelines and regulations. In San Diego County, O_3 and particulate matter are the pollutants of main concern, because exceedances of the CAAQS for those pollutants are experienced here in most years. In January 2021, SDAPCD sent a request to EPA to reclassify San Diego County from Serious Nonattainment to Severe Nonattainment for the 2008 ozone NAAQS and from Moderate to Severe Nonattainment for the 2015 ozone NAAQs. EPA granted this request in April 2021. SDAPCD prepared

and submitted to the USEPA, via CARB, ozone attainment plans identifying control measures and associated emissions reductions necessary to demonstrate attainment of the 75-ppb 2008 standard by July 20, 2027 and attainment of the 70-ppb 2015 standard by August 3, 2033. Reclassification imposes additional requirements under the CAA (for example, transportation control strategies and measures to offset emissions increases from vehicle miles traveled) that will help ensure the area has the tools needed to attain the standard. The 2020 Plan for Attaining the National Ozone Standards (SDAPCD 2020) addresses all requirements for both ozone standards.

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The Regional Air Quality Strategy (RAQS) for the SDAB was initially adopted in 1991 and most recently updated in 2022.The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O_3. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and USEPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans. Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS.

City of San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan identifies one goal and several policies regarding air quality. Those policies that are applicable to the project are listed below:

- Goal COS-4: Improve regional air quality and reduce greenhouse gas emissions that contribute to climate change.
    - Policy COS-4.1: Continue to work with the U.S. EPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.
    - Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.
    - Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.

Policy COS-4.8: Encourage and support the generation, transmission, and use of renewable energy.

The Environmental Justice Element of the City's General Plan identifies one goal and a policy regarding air quality, listed below:

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.

- Policy EJ-1.9: Continue to work with the U.S. EPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7, the project is consistent with the applicable General Plan goals and policies pertaining to air quality.

3.2.3 Thresholds of Significance

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* which provides guidance that a project would have a significant environmental impact if it would:

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

To determine whether a project would: (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or (b) result in a cumulatively considerable net increase of PM_{10} or $PM_{2.5}$ or exceed quantitative thresholds for O_3 precursors, nitrogen oxides (NO_x) and volatile organic compounds (VOCs), project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD, the agency responsible for air quality planning, monitoring, and enforcement within this basin. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIAs) (SDAPCD 2019).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. Since SDAPCD does not have AQIA thresholds for emissions of VOCs, the use of the Coachella Valley VOC threshold from the South Coast Air Quality Management District is acceptable.

The thresholds listed in **Table 3.2-5** represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality for both construction and operation. Emissions below the screening-level thresholds would not cause a significant impact. If emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the State and Federal AAQS, including appropriate background levels. For nonattainment pollutants (PM_{10} and $PM_{2.5}$ plus O_3, with O_3 precursors NO_x and VOCs), if emissions exceed the thresholds shown in Table 3.2-5, 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 the ambient air quality.

Table 3.2-5. Screening-Level Criteria for Air Quality Impacts

Pollutant	Total Emissions (Pounds/Day)
Construction Emissions	
Respirable Particulate Matter (PM_{10})	100
Particulate Matter ($PM_{2.5}$)	55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) (SCAQMD)	75
Operational Emissions	
Respirable Particulate Matter (PM_{10})	100
Particulate Matter ($PM_{2.5}$)	55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs) (1)	75
Reactive Organic Gases (ROG) SCAQMD(1)	75

Source: LDN 2023a.

Note (1) The USEPA uses the term Volatile Organic Compound (VOC) and CARB's Emission Inventory Branch uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor deviations between compounds that define each term; however, for purposes of the air quality study, they are assumed to be essentially the same due to the fact that SCAQMD interchanges these terms and because CalEEMod directly calculates ROG in place of VOC.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or Hazardous Air Pollutants (HAPs). SDAPCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1210 (adopted in 1996 and revised several times, most recently 2021), emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the public of potential health risks. If a project has the potential to result in emissions of any TAC or HAP that results in a cancer risk of greater than 10 in 1 million, the project would be deemed to have a potentially significant impact and would be required to implement toxics best available control technology (T-BACT) (SDAPCD 2021).

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person (SDAPCD 1976). A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors. Projects

that may cause odor conflicts include certain types of commercial uses (e.g., auto body shops, furniture repair), industrial, public (e.g., landfill, wastewater treatment facilities), and agricultural operations (CARB 2005). The impacts associated with construction and operation of the project were evaluated for significance based on the aforementioned significance criteria.

3.2.4 Project Impact Analysis

Threshold #1: Conflict with or obstruct implementation of the applicable air quality plan

As part of the RAQS and SIP planning process, the SDAPCD develops an emission inventory, based on growth projections from SANDAG and existing emissions figures within the SDAB. The SDAPCD then uses the emission inventory to conduct modeling to demonstrate that the SDAB will attain and maintain the state and federal O_3 standards. This inventory could be thought of as an "emissions budget" for the SDAB, accounting for current emissions as well as previously approved projects consistent with current General Plan policies.

Projects that are consistent with the currently adopted General Plan are determined to be consistent with SDAB's air quality plans, including the RAQS and the SIP. If a project proposes development that is consistent with or less than estimates provided in the General Plan, the project would not conflict with or obstruct implementation of the RAQS or SIP.

The project site has an existing General Plan Land Use designation of Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a maximum floor area ratio (FAR) of 1.50. The project includes a General Plan amendment request to change the existing MU3 designation to Mixed Use 2 (MU2), which has a maximum FAR of 2.25. The proposed project seeks to construct 119 multi-family residential units with 4,000 square feet (s.f.) of commercial space. The existing site MU3 designation would allow for a 90,000 s.f. office use with 10,000 s.f. of retail and 400 parking spaces. Development under the MU3 designation under this scenario would result in approximately 2,200 ADT, compared to the project, which would generate 874 ADT. Since the largest component of air quality emissions are typically derived from vehicular trips, the site would be considered less intense. Therefore, the project's development intensity and density would decrease from its current General Plan designation. The project is therefore considered consistent with the County's RAQS and would comply with the state's SIP. Impacts would be **less than significant.**

Threshold #2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard

Air quality impacts associated with the proposed project would likely come from two potential sources. The first is related to project construction, such as impacts related to construction equipment emissions and haul trucks for soils import. The second is operational from mobile source emissions from vehicles traveling to and from the proposed project as well as natural gas emission sources. Presented below are the analyses and findings for these two impact areas.

Construction Emissions Analysis

Construction activities are a source of fugitive dust emissions that may have a temporary, but substantial, impact on local air quality. These emissions are generally associated with grading, heavy equipment usage, blasting, and from construction worker commutes. Dust emissions and impacts vary with the level of activity, specific operations conducted, and prevailing winds. For the proposed project, rough grading activities assume site preparation, grading, paving, building construction and architectural coating.

Construction grading operations for the project are anticipated to include 4,030 cubic yards (cy) of cut material and 12,270 cy of fill material requiring an import of approximately 8,240 cy of fill material. CalEEMod modeling assumed a default load size of approximately 15 cy per truck for a total of 515 loads (1,030 trips) during project grading. Assuming 20 work days for materials import and the use of a 15 cy truck, there would be approximately 28 truckloads per day during grading. The project would start grading in late 2024 with residential construction to start shortly thereafter.

The California Emissions Estimator Model (CalEEMod) 2020.4.0 was used to calculate the emissions associated with the construction of the project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. It should be noted that CalEEMod 2022 is available, though since its release, it has been updated 29 times. Utilization of the current release version 2022.1.1.13 is anticipated to result in similar to lower air quality emission calculations compared to the 2022.04.0 model. Also, the 2020 version is considered more conservative and would therefore still be relevant for this analysis (LDN 2023a). The AERSCREEN dispersion model was used to determine the concentration for air pollutants at any location near the pollutant generator as well as to predict the maximum exposure distance and concentrations. The following design features were assumed within the CalEEMod analysis:

- All heavy diesel construction equipment would be classified as Tier IV
- In accordance with Rule 67 of the California Air Resource Board, only Low VOC paints shall be utilized onsite.
- Compliance with SDAPCD's fugitive dust rules and fugitive dust control measures which would be provided by the City of San Marcos.

Table 3.2-6 presents construction-related emissions. As shown in Table 3.2-6, construction emissions for all criteria pollutants would be below the screening level thresholds. Therefore, construction-related air emissions would not violate any air quality standards and impacts are **less than significant**.

Table 3.2-6. Construction Emissions (lbs/day)

Year	ROG	NO_x	CO	SO_2	PM_{10} (Dust)	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Dust)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
2024	0.66	23.37	17.80	0.12	10.36	0.23	10.59	4.30	0.22	4.52
2025	39.82	5.92	30.78	0.06	1.36	0.07	1.41	0.36	0.07	0.43
Total Construction Emissions	39.82	23.37	30.78	0.12	10.36	0.23	10.59	4.30	0.22	4.52
Screening Level Threshold	75	250	550	250	-	-	100	-	-	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**-**	**-**	**No**	**-**	**-**	**No**

Source: LDN 2023a.

Operational Emissions Analysis

Daily project operations would generate emissions from sources such as area, energy, mobile, waste and water use. Area Sources include consumer products, landscaping, and architectural coatings as part of regular maintenance. Operational emissions were calculated using the CalEEMod 2020.4.0 model for both summer and winter scenarios. The traffic inputs for CalEEMod were adjusted to be consistent with the proposed project traffic study. Based on that study, the proposed project would generate 874 net average daily trips (CRA 2023). The project traffic trip distances are based on an average trip distance within the County which can be calculated using the total daily VMT within the county (86,284,768) miles divided by the total trips in the County (16,007,853) or roughly 5.4 miles.

Table 3.2-7 summarizes project-related operational emissions, including vehicular and fixed-source emissions. As shown, total operational emissions of the project would be below the SDAPCD screening thresholds for all criteria pollutants in both summer and winter. Therefore, operation-related impacts would not violate any air quality standard and would be **less than significant**.

Table 3.2-7. Operational Emissions (lbs/day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Summer Scenario						
Area Source	3.37	0.11	9.82	0.00	0.05	0.05
Energy Use	0.03	0.22	0.10	0.00	0.02	0.02
Mobile Emissions	1.91	1.58	13.98	0.03	3.01	0.82
Total	**5.31**	**1.91**	**23.90**	**0.03**	**3.08**	**0.89**
Screening Level Threshold	75	250	550	250	100	55
Above threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Scenario						
Area Source	3.37	0.11	9.82	0.00	0.05	0.05
Energy Use	0.03	0.22	0.10	0.00	0.02	0.02
Mobile Emissions	1.84	1.71	14.75	0.03	3.01	0.82
Total	**5.23**	**2.05**	**24.67**	**0.03**	**3.08**	**0.89**
Screening Level Threshold	75	250	550	250	100	55
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LDN 2023a.
Notes: Daily pollutant generation assumes trip distances within CalEEMod.

Threshold #3: Expose sensitive receptors to substantial pollutant concentrations

Sensitive receptors are defined as schools, hospitals, resident care facilities, or day-care centers, as well as residential receptors in the project vicinity. The project site is located across the street from the El Dorado Park mobile home community and there are also existing single-family residential uses in the project vicinity. The threshold related to sensitive receptors addresses whether the project could expose sensitive receptors to substantial pollutant concentrations of criteria pollutants or TACs.

As identified above, if a project has the potential to result in emissions of any TAC that results in a cancer risk of greater than 10 in 1 million or substantial non-cancer risk, the project would be deemed to have a potentially significant impact.

To address the potential for emissions of construction-related TAC emissions to result in exposure of sensitive receptors to substantial pollutant concentrations, a screening health risk assessment was conducted for construction emissions. The risk-driving toxic air contaminant that would be emitted during construction would be diesel particulate matter.

Risks were calculated based on the Office of Environmental Health Hazards Assessment update guidance. Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home, and the exposure duration divided by averaging time, to yield the excess cancer risk. Based upon the air quality modeling, worst-case onsite PM_{10} from onsite construction exhaust would cumulatively produce 0.0044 tons over the construction duration (320 calendar days) or an average of $1.44x10^{-4}$ grams/second (LDN 2023a).

Utilizing these figures and based on the AERSCREEN dispersion model, the maximum 1-hr concentration is 0.349 µg/m^3 during the worst-case construction period. The annual concentration is 0.0279 µg/m^3. Therefore, the inhalation cancer risk is 3.74 per million over the construction duration. This risk would be expressed at the point of maximum exposure 75 meters (246 feet) away. As a condition of project approval, the project would be required to utilize Tier 4 diesel equipment. Since the threshold is 10 per million exposed with T-BACT installed, the project would have a less than significant impact and would be in compliance with the City's thresholds. It should be noted that sensitive residential receptors are adjacent to the project site. Since the maximum risk is 3.74 per million exposed (and the threshold is 10 per million), all sensitive receptors would have cancer risks at or less than 3.74 per million exposed which would also represent a less than significant impact (LDN 2023a).

There are known chronic health risks associated with diesel exhaust which are considered non-cancer risks. Non-Cancer risks or risks defined as chronic or acute are also known with respect to diesel particulate matter and are determined by the hazard index. To calculate hazard index, diesel particulate matter concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health Hazard Assessment. Diesel Exhaust has a REL of 5 µg/m^3 and targets the respiratory system (LDN 2023a). The hourly concentration of 0.349 µg/m^3 divided by the REL of 5 µg/m^3 yields a Health Hazard Index of 0.07, which is less than one. Therefore, based on thresholds for non-cancer risks, non-cancer health risks are also considered less than significant.

Therefore, toxic air contaminant impacts associated with the project would be **less than significant.**

Threshold #4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

Construction activities associated with development of the project site could generate trace amounts of substances such as ammonia, carbon dioxide, hydrogen sulfide, methane, dust, organic dust, and endotoxins. Any generation of odors related to these substances would occur intermittently during construction. Construction activities may also generate odors associated with diesel equipment at various locations. Odors would be strongest at the source and would quickly dissipate. The buffer between the project site and nearby residences, combined with the short term and intermittent duration of any odor emissions, would ensure construction-related impacts are **less than significant**.

Operation

Future development on the project site includes multi-family residences. This type of use is not typically characterized as one that would generate odors, compared to uses such as industrial and manufacturing. Therefore, odor-related impacts from future uses on the project site are determined to be **less than significant**.

3.2.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to air quality, the cumulative analysis is based upon a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document air quality.

As part of the RAQS and SIP planning process, the SDAPCD develops an emission inventory, based on growth projections from SANDAG (which are based on land use designations) and existing emissions figures within the SDAB. The SDAPCD then uses the emission inventory to conduct modeling to demonstrate that the SDAB will attain and maintain the state and federal O_3 standards. This inventory could be thought of as an "emissions budget" for the SDAB, accounting for current emissions as well as previously approved projects consistent with current General Plan policies.

Projects that are consistent with the currently adopted General Plan are determined to be consistent with SDAB's air quality plans, including the RAQS and the SIP. If a project proposes development that is consistent with or less than estimates provided in the General Plan, the project would not conflict with or obstruct implementation of the RAQS or SIP. Provided a project's emissions are consistent with the projections within the RAQS and SIP, the project would not result in a cumulatively considerable impact on O_3 within the SDAB.

The project site has an existing General Plan Land Use designation of Mixed Use 3 (MU3), which is a mixed-use non-residential designation. The project includes a General Plan amendment request to change the existing MU3 designation to Mixed Use 2 (MU2). The project proposes 119 multi-family residential units with 4,000 s.f. of retail and would generate 874 ADT. The existing site MU3 designation would allow for 90,000 s.f. of office use with 10,000 s.f. of retail and 400 parking spaces

and would generate approximately 2,200 ADT. Since the largest component of air quality emissions are typically derived from vehicular trips, development under the proposed project would be considered less intense. The project's development intensity and density will decrease from its current General Plan designation, which is what has served as the basis of SANDAG's growth projections. In addition, the project would conform to local air district significance thresholds. The project is therefore considered consistent with the County's RAQS and would comply with the state's SIP. Cumulative Impacts would be **less than significant.**

3.2.6 Mitigation Measures

Based upon the analysis presented in Sections 3.2.4 and 3.2.5, project and cumulative air quality impacts would be less than significant. Therefore, no mitigation measures are necessary.

3.2.7 Conclusion

Implementation of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction or operation, nor would the project conflict with or obstruct implementation of the RAQS or SIP. Additionally, due to the nature of the project, sensitive receptors would not be exposed to substantial pollutant concentrations nor would a substantial number of people be exposed to objectionable odors.

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3.3 Biological Resources

Introduction

This section provides a biological resources impact analysis for the proposed project. The analysis in this section is based upon the following reports prepared by Dudek, which are included as **Appendix D.1 and D.2** of the Environmental Impact Report (EIR):

- *Biological Resources Letter Report for the Capalina Apartments Project,* City of San Marcos. Prepared by Dudek, June, 2023 (Dudek 2023a)
- *Focused Rare Plant Survey Report for the Capalina Apartments Project*, City of San Marcos, San Diego County, California. June 2023 (Dudek 2023b).

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact to riparian habitat or sensitive natural communities, no impact to state or federally protected wetlands, and no impact to wildlife corridors and nursery sites. Section 5.2, Environmental Effects Found Not to be Significant – Biological Resources, of the EIR provides additional information on these topics.

Table 3.3-1 summarizes the project- and cumulative-level impact analysis by threshold for the proposed project.

Table 3.3-1. Biological Resources Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1: Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Significant Impact	Less than Significant	Mitigated to Less Than Significant
#2: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.3.1 Existing Conditions

The 2.51-acre project site is currently undeveloped, vacant land located just north of Capalina Road. Per the Phase I Environmental Site Assessment prepared for the project, the project site appeared to be vacant pastureland from prior to 1939 until approximately 1974, when the northwestern perimeter of the property appeared to be vacant, rough-graded land. By 1980, the project site appeared to be vacant, rough-graded land with what appeared to be an area graded for uses as a vehicle parking area on the southeastern portion of the property. By 1996, the property appeared to be vacant, weed-abated land. By 2005, a vehicle parking area appears to be to be located on the southeastern perimeter of the subject property. By 2012, the vehicle parking area was removed and the property appeared to be vacant, weed-abated land (The Phase 1 Group 2022).

The project site is surrounded by existing commercial development and roads. The site is generally flat and with elevations ranging from 580-600 feet above mean sea level (AMSL). The entire site is occupied with disturbed habitat (**Figure 3.3-1**).

Vegetation Mapping and Biological Surveys

To locate and characterize natural vegetation communities, including habitats for special-status species, within the project area, Dudek conducted biological field surveys in May 2021, September 2022, and May 2023, including a biological reconnaissance survey, vegetation mapping, general habitat assessment, and two focused rare plant survey.

Vegetation communities and land covers within the survey area were mapped in the field based on general physiognomy and species composition. Data was recorded using the ArcGIS Field Maps application over aerial base map imagery of the study area. Following fieldwork, remaining vegetation mapping was completed using ArcGIS on a desktop.

The vegetation community and land cover mapping follow the Draft Vegetation Communities of San Diego County which is based on the Preliminary Descriptions of the Terrestrial Natural Communities of California.

All plant species encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status. Moreover, all plant species encountered in the field were recorded. Latin and common names for plant species with a California Rare Plant Rank follow the California Native Plant Society's (CNPS) Online Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2021). For plant species without a California Rare Plant Rank, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson 2021) and common names follow the California Natural Community list (CDFW 2021) or the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service Plants Database (USDA 2021).

Rare Plant Surveys

Dudek botanist Erin Bergman conducted a reference check for threadleaf brodiaea (*Brodiaea filifolia*), Orcutt's brodiaea (*Brodiaea orcuttii*), and San Diego button celery (*Eryngium aristulatum var. parishii*) on the morning of May 21, 2021, before conducting rare plant surveys. These species were the only ones that were determined to have a potential to occur within the project site. This reference check was based on collections documented within the Calflora database. The Calflora database offers GPS point locations for plant species across California (Calflora 2022). Ms. Bergman collected coordinates from the database as close to the site as possible to ensure phenology would be similar. Ms. Bergman

targeted two locations for Brodiaea within a two to five-mile radius of the project site and one location for San Diego button celery within five miles of the project site. Ms. Bergman observed all species in full bloom (in high densities) before going to the site to perform the field surveys. On May 21, 2021, temperatures for the reference check were between 69°F and 77°F, winds were 0 to 4 miles per hour, and skies were clear.

Immediately after the reference check, the botanist conducted a focused special-status rare plant survey within the project site on May 21, 2021. The full rare plant survey report is included as Appendix C to the biology report (Appendix D.1 of this document).

An additional focused rare plant survey, with an emphasis on thread-leaved brodiaea (*Brodiaea filifolia*; CRPR 1B.1, CE, FT) and Orcutt's brodiaea (*Brodiaea orcuttii*; CRPR 1B.1) was conducted on May 31, 2023, by botanist Charles Adams. The reference check was conducted on May 30, 2023, one day prior to conducting the rare plant survey. This reference check was based on known populations within a 5-mile radius of the proposed project site. Mr. Adams observed both species in full bloom (in high densities). The temperatures for the reference check were between 63°F and 70°F, winds were 0 to 4 miles per hour, and skies were overcast. Conditions for the focused rare plant survey were the same as those for the reference check. Surveys for special-status species were conducted within the project site by walking transects. Mr. Adams used both the Collector mobile application and Dudek forms mobile application to record data. Transects were included in the Collector mobile application as guidance. These transects were spread at a distance of 10 feet to cover every section of the project site, including areas with high-density vegetation. Mr. Adams followed these 10-foot transect lines across the project site. This focused special-status plant survey conformed to the appropriate guidelines of the prior survey(s). The 2023 focused rare plant survey memorandum is in Appendix D.2.

No rare plants were observed within the project site during the focused rare plant survey conducted by Erin Bergman in May 2021, or during the follow-up focused rare plant survey conducted by Charles Adams on May 31, 2023.

Vegetation Communities

The Multiple Habitat Conservation Program (MHCP) organizes vegetation into habitat group types: Wetland Communities, Rare Upland, Coastal Sage Scrub, Chaparral, Annual Grassland, and Other (SANDAG 2003). Only one vegetation community, disturbed habitat, was identified and mapped during a general biological survey conducted in September 2022 within the project site and is described in more detail below.

Disturbed Habitat

Areas classified as disturbed habitat are areas that have been physically disturbed and are no longer recognizable as a native or naturalized vegetation association but they 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. Examples of these areas may include graded landscapes, graded firebreaks, graded construction pads, temporary construction staging areas, off-road-vehicle trails, areas repeatedly cleared for fuel management, or areas that are repeatedly used in ways that prevent revegetation (e.g., parking lots, trails that have persisted for years).

Disturbed habitat occupies the entire project site. The site is regularly mowed and maintained, and is dominated by species commonly found in disturbed areas including Russian thistle (Salsola tragus), Bermuda grass (*Cynodon dactylon*), tocalote (*Centaurea melitensis*), short-pod mustard (*Hirschfeldia incana*), and various species of bromes (*Bromus sp.)* and erodium (*Erodium sp.).* There were six native

species throughout the site including California encelia (*Encelia californica*), mulefat (*Baccharis salicifolia*) coyote brush (*Baccharis pilularis ssp. consanguinea*), telegraph weed (*Heterotheca grandiflora*), western ragweed (*Ambrosia psilostachya*) and gumplant (*Grindelia camporum*). All of these species were present in limited capacity and scattered throughout the site. Specifically, the one individual mulefat that was present was singular in nature and growing along the fence line adjacent to a paved parking lot that bordered the site, so it did not constitute a native riparian vegetation community formation. None of the native plant species found are associated with sensitive habitats. Lastly, there are several non-native trees scattered throughout the site including Mexican fan palms (*Washingtonia robusta)* and Peruvian pepper tree (*Schinus molle*). Disturbed habitat would be categorized under Group F – Other Lands.

Disturbed Habitat

The small strip of land that is designated as public right-of-way along the project's frontage onto Capalina Road is 0.15-acres and consists of disturbed habitat.

Developed Area

Adjacent to the project site is a 1.42- acre area consisting of an old, paved parking lot. This would be characterized as a developed area. This adjacent parcel is burdened by a San Diego County Water Authority easement, and additionally a 1987 reciprocal easement agreement which grants the project parcel an express easement for ingress, egress, and parking across the entirety of APN 219-115-35. The project applicant is proposing to accommodate all parking onsite and does not anticipate using this area, under the terms of the reciprocal easement agreement, as part of the project.

Rare Plant Survey/Special-Status Plants

Based on review of the site, three special-status plant species had a high potential to occur within the project site: Orcutt's brodiaea, threadleaf brodiaea and San Diego button celery. No rare plants were observed within the project site during the focused rare plant survey conducted by Erin Bergman in May 2021, or during the follow-up focused rare plant survey conducted by Charles Adams on May 31, 2023.

Special Status Wildlife Species

Attachment B of the Biological Resources Report (Appendix D.1 of the EIR) summarizes the wildlife species observed on the project site. No special-status wildlife species were observed within the project site during the biological surveys conducted in 2021 and 2022. No special-status wildlife species are expected to occur within the project site based on reasoning including but not limited to available occurrence data, habitat requirements, site elevation, level of disturbance, and surrounding urbanization.

A total of five commonly occurring wildlife species were detected on the project site and include house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynochos*) and mourning dove (*Zenaida macroura*).

During the general habitat assessment, the site was assessed for potential presence of suitable fairy shrimp habitat. Due to the highly disturbed nature of the site (regular mowing and anthropogenic activity), lack of road ruts, earthen depressions, as well as lack of vernal pool associated plant species, it was determined that fairly shrimp were not expected within the project site due to lack of suitable habitat and conditions.

There is no federally designated critical habitat for special-status wildlife located within the project site (USFWS 2022b).

3.3.2 Regulatory Setting

Federal

United States Army Corps of Engineers – Clean Water Act

Recognizing the potential for continued or accelerated degradation of the Nation's waters, the U.S. Congress enacted the Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act (33 U.S.C. 1344). The objective of the CWA is to maintain and restore the chemical, physical, and biological integrity of the waters of the United States. Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into the waters of the United States, including wetlands.

United States Fish and Wildlife Service – Endangered Species Act

The United States Fish and Wildlife Service (USFWS) is responsible for enforcing the federal Endangered Species Act (ESA), Migratory Bird Treaty Act, and Wildlife Coordination Act, and reviews and comments on applications for Section 404 CWA permits submitted to the USACE. If the proposed project is determined to have an adverse effect on a species that is federally listed as threatened or endangered, consultation with the USFWS would be required. If the proposed project may result in "take" of a federally listed species, an incidental take permit would be required. "Take" is defined in the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The project site does not contain any areas mapped as "critical habitat," as mapped by USFWS.

United States Fish and Wildlife Service – Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed in 50 CFR 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and includes any part, egg, or nest of such bird (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the ESA. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

State

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) has the authority to reach an agreement with an agency or private party proposing to affect intermittent or permanent wetlands habitat, pursuant to Sections 1601-1616 of the California Fish and Game Code. Section 1602 of the California Fish and Game Code requires notification to CDFW prior to diversion of, obstruction of, use of material from, or deposition of materials in any river, stream, or lake. In accordance with its policy of *"no net loss of*

wetland habitats," the Department requires mitigation for all impacts to any wetlands, regardless of acreage.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Section 2050, et seq.) generally parallels the main provisions of the Federal ESA and is administered by the CDFW. Its intent is to prohibit "take" and protect state listed endangered and threatened species of fish, wildlife, and plants. Unlike its federal counterpart, the CESA also applies the take prohibitions to species petitioned for listing (state candidates).

Natural Community Conservation Planning

CDFW's Natural Community Conservation Planning (NCCP) program is an effort by the State of California, and numerous private and public partners, that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. An NCCP identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

Multiple Habitat Conservation Program

The MHCP is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in Northwestern San Diego County. The MHCP encompasses the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46 percent) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species.

The City of San Marcos began preparing a draft of the City Subarea Plan of the MHCP in December 1999 and although the City's Draft Subarea Plan has not yet been approved by the USFWS and CDFW, the plan is a component of the adopted MHCP, and is currently being used as a guide for open space design and preservation within the City. The intent of the City's Draft Subarea Plan is to identify a citywide preserve system that meets local and regional biological goals while minimizing fiscal and economic impacts to the City and adverse impacts on private property owners. To help achieve this goal, certain areas, known as focused planning areas (FPAs), have been designated with parcel-level preserve goals which would contribute to achieving local and regional conservation goals while minimizing adverse effects on property rights and property values.

The project site is located within the MHCP. The proposed project site is situated within an urbanized area, is surrounded by paved roads and/or commercial developments, and does not act as a wildlife corridor. It is not designated as a Biological Core and Linkage Area or MHCP Focused Planning Area.

Local

San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of biological resources. The following goals and policies apply to the project:

- Goal COS-1: Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.

  - Policy COS-1.1: Support the protection of biological resources through the establishment, restoration, and conservation of high quality habitat areas.
  - Policy COS-1.2: Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.

- Goal COS-2: The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.
  - Policy COS-2.1: Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.
  - Policy COS-2.2: Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.
  - Policy COS-2.6: Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As shown in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies.

3.3.3 Thresholds of Significance

CEQA Guidelines define "significant effect on the environment" as a "substantial or potentially substantial adverse change in the environment." CEQA Guidelines further indicate that there may be a significant effect on biological resources if the project would:

- Threshold #1: Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Threshold #2: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.
- Threshold #3: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

As noted above, it was determined that there would be no impact to riparian habitat or sensitive natural communities, no impact to state or federally protected wetlands, and no impact to wildlife corridors and nursery sites. Section 5.2, Environmental Effects Found Not to be Significant – Biological Resources, of this EIR provides additional information on these topics. The Initial Study is included in Appendix B.1.

3.3.4 Project Impact Analysis

The proposed project is expected to permanently impact the entire project site through grading and development of the project site.

Threshold #1: Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Direct and Indirect Impacts – Special - Status Plants Species

No rare plants or special-status were observed within the project site during either of the focused rare plant survey conducted in May 2021 and May 2023. The potentially occurring rare plant species are presumed absent from the site based on focused surveys conducted under suitable conditions and timing for detection (i.e., reference populations were blooming). The proposed project would not impact any special status or rare plant species.

Direct and Indirect Impacts - Special - Status Wildlife Species

No special-status wildlife was observed within the project site during the biological surveys conducted in 2021 and 2022. No special-status wildlife species are expected to occur within the project site based on reasoning including but not limited to available occurrence data, habitat requirements, site elevation, level of disturbance, and surrounding urbanization. Suitable habitat for sensitive species of the region (coastal sage scrub, riparian, vernal pools) is lacking from the site. Further, there is no federally designated critical habitat (USFWS 2022b) for special-status wildlife located within the project site.

The entire project site is disturbed habitat supporting species commonly occurring in urbanized areas. A total of five commonly occurring wildlife species were detected on the project site and include house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynochos*) and mourning dove (*Zenaida macroura*). Therefore, the proposed project would not result in any direct or indirect impacts to special status wildlife species.

Direct and Indirect Impacts - Nesting Birds

The proposed project has the potential to impact active bird nests if vegetation is removed or ground disturbing activities occur during the breeding and nesting season (typically February 1 to September 15). Impacts on nesting birds are prohibited by the MBTA and the California Fish and Game Code (CFGC). Clearing, grubbing and construction activities, if conducted during the breeding and nesting season, could directly or indirectly impact species protected under the MBTA. This represents a **significant impact** (**Impact BIO-1**) and mitigation is required.

- **Impact BIO-1:** Potential to impact avian species protected under the Migratory Bird Treaty Act if tree removal, vegetation removal, or other construction activities occur during the nesting season.

Threshold #2: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.

Existing ornamental vegetation would be removed during project construction and new trees and landscaping would be planted. Specifically, four Mexican fan palms are proposed to be removed to prepare the site for development. General Plan Policy COS-2.6 requires that any removed trees be replaced at a 1:1 ratio. The proposed landscape plan includes 82 trees. The project would replace trees at an approximate 20:1 ratio, which greatly exceeds the requirements of Policy COS-2.6. Proposed tree species to be planted per the landscape plan include Marina strawberry tree, Chinese flame tree, African sumac, Brisbane box, true green elm, crape myrtle, sweetshade, sweet bay, shrubby yew podocarpus, Carolina laurel, tipu tree, and pink trumpet tree. The landscape plan is included as Appendix A.2. The project would not conflict with any other local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact is identified for this issue area.

Threshold #3: 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 located within the MHCP. However, the project site is not located within a FPA as defined in City's Draft Subarea Plan nor is it identified as a Biological Core and Linkage area (Dudek 2023a). The MHCP organizes vegetation into habitat group types: Wetland Communities, Rare Upland, Coastal Sage Scrub, Chaparral, Annual Grassland, and Other. (SANDAG 2003). Only one vegetation community, disturbed habitat, was identified within the project site. Disturbed habitat impacts are considered less than significant in the City's Draft Subarea Plan. Therefore, a **less than significant impact** is identified and no mitigation is required.

3.3.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projects contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to biological resources the cumulative analysis is based upon a list approach. All of the cumulative projects within the city identified in Table 2-3 are considered in this cumulative analysis.

The biological cumulative impact analysis focuses on those projects that would have a similar type of biological resource impact as the proposed project. The project has the potential to impact species protected under the MBTA.

The cumulative projects which remove trees or vegetation during the nesting season could also have the potential for impacts to species protected under the MBTA. These impacts are avoided through restrictions on construction timing, or the performance of pre-construction surveys to ensure that nesting birds would not be impacted. This is similar to the mitigation identified for the proposed project and would ensure that cumulative impacts are less than significant.

3.3.6 Mitigation Measures

Implementation of the following mitigation measure would be required as a condition of project approval:

Impact BIO-1 Nesting Birds

MM-BIO-1 Construction-related ground-disturbing activities (e.g., clearing/grubbing, vegetation removal, grading, and other intensive activities) that occur during the breeding season (typically February 1 through September 15) shall require biological survey for nesting bird species to be conducted within the limits of grading within 72 hours prior to construction. This survey is necessary to ensure avoidance of impacts to nesting raptors and/or birds protected by the federal Migratory Bird Treaty Act and California Fish and Game Code, Sections 3503 and 3513. If any active nests are detected, the area shall be flagged and mapped on the construction plans or a biological resources figure, and the information provided to the construction supervisor and any personnel working near the nest buffer. Active nests will have buffers established around them (e.g., 250 feet for passerines to 500 feet for raptors) by the project biologist in the field with brightly colored flagging tape, conspicuous fencing, or other appropriate barriers or signage. The project biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to avoid inadvertent impacts to these nests. The project biologist may adjust the 250-foot or 500-foot setback at his or her discretion depending on the species and the location of the nest (e.g., if the nest is well protected in an area buffered by dense vegetation). However, if needed, additional qualified monitor(s) shall be provided in order to monitor active nest(s) or other project activities in order to ensure all of the project biologist's duties are completed. Once the nest is no longer occupied for the season, construction may proceed in the setback areas.

If construction activities, particularly clearing/grubbing, grading, and other intensive activities, stop for more than 3 days during the nesting season, an additional nesting bird survey shall be conducted within the proposed impact area.

3.3.7 Conclusion

Based on the presence of suitable avian nesting habitat, pre-construction clearance survey for nesting birds would be conducted to ensure that no impacts on nesting birds that are afforded protection under the MBTA occur (see mitigation measures MM-BIO-1). Mitigation measure MM-BIO-1 requires a preconstruction survey if construction is proposed during the nesting season. If nesting birds are found, avoidance measures would be implemented to minimize impacts. With the implementation of mitigation measure MM-BIO-1, direct impacts on nesting birds would be less than significant. All other biological resources impacts were determined to be less than significant.

Figure 3.3-1. Vegetation Communities and Land Cover Types



Source: Dudek 2023a.

Figure 3.3-2. Proposed Impacts to Vegetation Communities and Land Cover Types



Source: Dudek 2023a.

3.4 Cultural Resources

Introduction

This section identifies the cultural resources on the project site and analyzes the potential impacts of the proposed project on cultural resources. Cultural resources considered in this analysis include archaeological (prehistoric) resources and historical resources. Tribal Cultural Resources are analyzed in Section 3.16 of the Environmental Impact Report (EIR). [4]

The analysis in this section is based upon the following report prepared by Dudek, which is included as **Appendix E** of the EIR:

- *Archaeological Resources Inventory Report for the Capalina Apartments Project, City of San Marcos, California* (Dudek 2023c)

The archaeological resources inventory report included a record search, literature review, correspondence with Native American contacts, and field survey. The analysis also considers the *California Environmental Quality Act (CEQA) Guidelines Appendix G* and applicable State and Local regulations, including the City of San Marcos General Plan. The archaeological resources inventory report and significance evaluation are included as Appendix E of the EIR and the General Plan is available on the City's web site.[5]

In the Initial Study checklist prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact to historic resources since none were identified on the site. Section 5.4, Environmental Effects Found Not to be Significant – Cultural Resources of this EIR provides additional information on this topic.

Table 3.4-1 summarizes the project- and cumulative-level cultural resources impacts, by threshold.

Table 3.4-1. Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 – Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	Potentially Significant	Less than Significant	Mitigated to Less Than Significant
#2 – Disturb any human remains, including those interred outside of dedicated cemeteries.	Potentially Significant	Less than Significant	Mitigated to Less Than Significant

[4] Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

[5] http://www.san-marcos.net/work/economic-development/general-plan

3.4.1 Existing Conditions

Records Search

Previous Cultural Resources Reports

A records search request was submitted to the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS) on September 16, 2022 and the results were provided on September 27, 2022. The records search results identified that 59 previous cultural resources studies have been conducted within one mile of the project area. Of the 59 previous studies, five studies intersect the project area. These studies consist of an archaeological report, a cultural resources inventory report, a cultural resources assessment report, an Environmental Impact Report (EIR), and a records search and literature review. Overall, the entire project area has been previously studied with negative results identified.

Previously Recorded Cultural Resources

The SCIC records search did not identify any cultural resources within the project area. The records search did identify 32 cultural resources within the one-mile search radius of the project area. Of the total 32 resources identified in the one-mile buffer, 17 are prehistoric resources, 14 are historic resources, and one is a multi-component site. No historic addresses are located within the project area, however, 11 are located within the one-mile search radius.

Archival Research

In addition to the SCIC records search, Dudek conducted an on-line review of historical aerial photographs of the project area and general vicinity, to help determine the possible development and land use of the project area in the past. Historical aerial photographs of the project area were available for 1938, 1947, 1953, 1964, 1967, 1978, 1980-1991, 1993-2000, 2002, 2003, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2022 (NETR 2022). **Table 3.4-2** summarizes the historical aerial photographic review.

Table 3.4-2. Historical Aerial Photograph Review

Date	Description
1938 to 1953	Project area was undeveloped, however, Capalina Road to the south and W. Mission Road to the north are observed
1964 to 1967	The project area remains undeveloped; however, residential development can be observed to the south and northeast of the project area
1978	Commercial development is observed immediately west and east of the project area, and within the surrounding vicinity
1980	The vegetation within the project area appears to be cleared, and a building pad is observed within the eastern section of the project area.
1984	Some light grading can be observed on the eastern and northern borders of the project area.
1985 to 1987	The eastern section of the project area is used as a dirt parking lot for vehicles.
1993	The southeastern section of the project area has undergone some grading activities

Date	Description
1994 to 2002	No changes observed in the project area.
2003	A small rectangular sandy area is observed within the northern section of the project area
2009	The rectangular box is no longer observed within the project area.
2009 to present	The project area remains undeveloped to the present.

Historical topographic maps of the project area were reviewed (earliest map available is 1893). The historical topographic maps from 1970 to 2018 shows the Second San Diego Aqueduct trending north to south to the west of the project area. No historic-age structures were identified within the project area.

Tribal Correspondence and Coordination

On September 16, 2022, Dudek requested a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC) for the project area. The SLF consists of a database of known Native American resources. The NAHC replied on November 9, 2022 and the SLF search came back negative. The NAHC provided a list of Native American tribes and individuals/organizations with traditional geographic association that might have knowledge of cultural resources in this area.

Outreach letters were mailed November 14, 2022, to all Native American representatives included on the NAHC contact list. These letters attempted to solicit additional information relating to Native American resources that may be impacted by the project. Native American representatives were requested to define a general area where known resources intersect the project area. Two responses have been received to date, one from the Rincon Band of Luiseño Indians and one from the Pechanga Band of Indians.

The Rincon Band of Luiseño Indians responded on December 12, 2022, stating that the project area is located within their Traditional Use Area and Specific Area of Historic interest and the potential exists that the project may impact TCRs or Traditional Cultural Properties (TCPs). They recommend archaeological and tribal monitoring for any ground disturbing activities.

The Pechanga Band of Indians responded on December 23, 2022, stating that the project is located near a TCP and three Ancestral Placename Villages with 18 previously recorded sites within one mile of the project. The Pechanga Band of Indians pointed out that Agua Hedionda Creek is located near the project boundary and expressed concern as they historically buried their Ancestors near long-term waters, and native soils likely remain intact beneath the plow-zone, meaning there is a high potential to encounter sensitive subsurface resources during ground-disturbing activities associated with the project. They are recommending monitoring by a San Diego County qualified archaeologist and a professional Pechanga Tribal Monitor during earthmoving activities.

Archaeological (Prehistoric) Resources

Dudek archaeologist Makayla Murillo conducted an intensive level pedestrian survey of the proposed project area on October 12, 2022. Saving Sacred Sites Native American monitor Jessica Alexander participated in the pedestrian survey. All survey work was conducted employing standard archaeological procedures and techniques consistent with the Secretary of the Interior Standards. Five-meter interval survey transects were conducted in an east-west direction for the project area.

Within the transects, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials.

The project area is relatively flat and undeveloped with a small east facing slope along the western boundary. Some disturbances were observed, such as stockpiled imported rock on the northwesternmost portion of the project area. Ground visibility was fair (25-50%) in areas where the ground surface was obscured by vegetation. Approximately 75% of the project area was obscured by dead grass and a few dispersed palm trees. Modern debris (e.g., refuse, plastic fragments, irrigation pipes, glass fragments) is strewn throughout the project area. The pedestrian survey did not identify any cultural resources within the project area.

3.4.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to cultural resources, including state and local guidelines.

Federal/State

Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regards to potentially ancestral human remains associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed Project.

The category termed "Traditional Cultural Properties" in discussions of cultural resource management performed under federal auspices is also potentially relevant to prehistoric sites. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include the following:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and/or

5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

State

Native American Historic Cultural Sites

The Native American Historic Cultural Sites 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 establishes the NRHC 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 one year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, required all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

Health and Safety Code 7050.5

This code establishes that any person who knowingly mutilates, disinters, wantonly disturbs, or willfully removes any human remain in or from any location without authority of the law is guilty of a misdemeanor. It further defines procedures for the discovery and treatment of Native American remains.

Health and Safety Code 8010-8011

This code is intended to provide consistent state policy to ensure that all California Indian human remains and cultural material are treated with dignity and respect. The code extends policy coverage to non-federally recognized tribes and federally recognized groups.

Assembly Bill 2461

The section provides procedures for private land owners to follow upon discovering Native American human remains. Land owners are encouraged to consider culturally appropriate measures if they discover Native American human remains as set forth in California PRC 5097.98.

Senate Bill 18

SB 18, approved in 2004, amends the California Civil Code and the California Government Code, requiring cities and counties to contact and consult with California Native American tribes prior to adopting or amending any general plan or specific plan, or designating land as open space in order to preserve or mitigate impacts to specified Native American places, features and objects that are located within a city's or county's jurisdiction. SB 18 also requires cities and counties to hold in strict confidence any information about the specific identity, location, character, or use of these resources. In 2005, the Office of Planning and Research (OPR) published Tribal Consultation Guidelines to guide

cities and counties on the process of engaging in consultation in accordance with SB 18. The NAHC maintains a list of California Native American Tribes with whom cities and counties must consult pursuant to SB 18.

Assembly Bill 52

AB 52 was approved in 2014 and adds new requirements regarding consultation with California Native American Tribes and consideration of tribal cultural resources. The law went into effect on July 1, 2015, and after that date, if requested by a California Native American Tribe, lead agencies must consult prior to the release of a Negative Declaration, Mitigated Negative Declaration or Draft EIR. Tribal Cultural Resources are discussed in Section 3.16 of the EIR.

Local

San Marcos General Plan Conservation and Open Space Element

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of archaeological, and historic resources. The following goals and policies apply to the project:

  - Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.

- Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.

  - Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.

  - Policy COS-11.2: Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction offsite, and/or photo-preservation.

  - Policy COS-11.3: Identify opportunities for adaptive reuse of historic sites and buildings to preserve and maintain their viability.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7, the project is consistent with the applicable General Plan goals and policies pertaining to cultural resources.

San Marcos Archaeological and Historical Resources Consultant Guidelines

The City of San Marcos published guidelines for archaeological and historical resources consultants in January 2023. The guidelines are generally meant to aid third party consultants who prepare archaeological or architectural history inventories, surveys, evaluations, and other technical documents. These guidelines include information pertaining to the minimum qualifications, records searches, tribal outreach, pedestrian surveys, reporting, research design, findings, discussion and evaluations, management conclusions, references, and appendices of inventories, surveys,

evaluations, and other technical documents (City San Marcos 2023). Dudek prepared the archaeological resources inventory report in accordance with these guidelines.

3.4.3 Thresholds of Significance

The determination of significance for cultural resources is based on *CEQA Guidelines Appendix G*. Impacts to cultural resources would be significant if the proposed project would:

- Threshold #1: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- Threshold #2: Disturb any human remains, including those interred outside of dedicated cemeteries.

As noted above, it was determined that there would be no potential for impact to historic resources since none were identified on the site. Section 5.4, Environmental Effects Found Not to be Significant – Cultural Resources of this EIR provides additional information on this topic. The Initial Study is included as Appendix B.1 of this document.

3.4.4 Project Impact Analysis

The project site is vacant. Ground disturbing activities can result in impacts to archaeological resources if they are present on the project site. The following analysis discusses the potential for the proposed project to impact cultural resources.

Threshold #1: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

The archaeological resources inventory for the project indicates that there is low-moderate sensitivity for identifying intact subsurface archaeological deposits during implementation (Dudek 2023c). The SCIC records search and the pedestrian survey did not identify any cultural resources within the project area; however, 32 cultural resources were identified within the 1-mile radius. The review of aerial photographs also reveals the project area has been disturbed by clearing activities. An intensive pedestrian survey of the project area did not identify any cultural resources; however, the project area has not been developed, and because alluvial soils are present throughout the project area from depths ranging from one to five feet deep, there is potential for subsurface cultural resources to exist on the project site. This represents a **potentially significant impact** (**Impact CR-1**) and mitigation is required.

- **Impact CR-1** Due to grading and ground disturbing activities, the project has the potential to impact unidentified archaeological resources on the project site.

Threshold #2: Disturb any human remains, including those interred outside of dedicated cemeteries.

The archaeological resources field survey conducted for the project did not identify any human remains or find any indications that they would be expected to be found on the project site. If human remains are encountered during project construction, there is a potential for a **significant impact** (**Impact CR-2**).

- **Impact CR-2** There is a potential for project construction activities to disturb previously unidentified human remains on the project site.

State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. Adherence to State Health and Safety Code Section 7050.5 is mandated and is reiterated as a mitigation measure in Section 3.4.6.

3.4.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to cultural resources, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts on cultural resources. All of the cumulative projects identified in Table 2-3 are considered in this cumulative analysis.

Archaeological Resources

While no resources were identified on the project site during the archaeological resources reconnaissance, it was determined that there could be a potential for unidentified resources to be encountered subsurface during project grading. Other cumulative projects would be required to assess the potential for impact to archaeological resources and provide mitigation measures or avoidance measures to reduce significant impacts to cultural resources consistent with the requirements of CEQA and the City. Additionally, the lead agency is required to consult with tribes pursuant to the requirements of SB 18 and/or AB 52. The City requires standard conditions of approval related to construction monitoring by an archaeologist to ensure there are no inadvertent impacts to archaeological resources. Cumulative impacts would be **less than significant**.

3.4.6 Mitigation Measures

Archaeological Resources (Impact CR-1)

The following cultural resources mitigation measures shall apply for ground disturbing activities during the project construction phase.

MM-CR-1 Pre-Excavation Agreement: Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall enter into a Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement) with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City. The purpose of the Pre-Excavation Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the TCA Tribe for the protection, treatment, and repatriation of Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical

investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the TCA Tribe requirements for protocols and protection of tribal cultural resources that were agreed to during the tribal consultation.

The landowner shall relinquish ownership of all non-burial related tribal cultural resources collected during construction monitoring and from any previous archaeological studies or excavations on the project site to the TCA Tribe for proper treatment and disposition per the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Pre-Excavation Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

MM-CR-2 Construction Monitoring: Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner or Grading Contractor shall provide written documentation (either as signed letters, contracts, or emails) to the City's Planning Division stating that a Qualified Archaeologist and Traditionally and Culturally Affiliated Native American monitor (TCA Native American monitor) have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Pre-Excavation Agreement.

The Qualified Archaeologist and TCA Native American monitor shall be invited to attend all applicable pre-construction meetings with the General Contractor and/or associated subcontractors to present the construction monitoring program. The Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that occur in areas of native soil or other permeable natural surfaces that have the potential to unearth any evidence of potential archaeological resources or tribal cultural resources. In areas of artificial paving, the Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb more than six inches below the original pre-project ground surface to identify any evidence of potential archaeological or tribal cultural resources. No monitoring of fill material, existing or imported, will be required if the General Contractor or developer can provide documentation to the satisfaction of the City that all fill materials being utilized at the site are either: 1) from existing commercial (previously permitted) sources of materials; or 2) are from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the Qualified Archaeologist and TCA Native American monitor.

The Qualified Archaeologist and TCA Native American monitor shall maintain ongoing collaborative coordination with one another during all ground disturbing activities. The requirement for the construction monitoring program shall be noted on all applicable construction documents, including demolition plans, grading plans, etc. The Applicant/Owner or Grading Contractor shall provide written notice

to the Planning Division and the TCA Tribe, preferably through e-mail, of the start and end of all ground disturbing activities.

Prior to the release of any grading bonds, or prior to the issuance of any project Certificate of Occupancy, an archaeological monitoring report, which describes the results, analysis, and conclusions of the construction monitoring shall be submitted by the Qualified Archaeologist, along with any TCA Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Manager for approval. Once approved, a final copy of the archaeological monitoring report shall be retained in a confidential City project file and may be released, as a formal condition of Assembly Bill (AB) 52 consultation, to San Luis Rey Band of Mission Indians, Rincon Band of Luiseño Indians, Pechanga Band of Indians, or any parties involved in the project specific monitoring or consultation process. A final copy of the report, with all confidential site records and appendices, will also be submitted to the South Coastal Information Center after approval by the City.

MM-CR-3 Unanticipated Discovery Procedures: Both the Qualified Archaeologist and the TCA Native American monitor may temporarily halt or divert ground disturbing activities if potential archaeological resources or tribal cultural resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist, in consultation with the TCA Native American monitor) will be minimally documented in the field. All unearthed archaeological resources or tribal cultural resources will be collected, temporarily stored in a secure location (or as otherwise agreed upon by the Qualified Archaeologist and the TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the archaeological resources or tribal cultural resources are considered potentially significant by the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor, then the City and the TCA Tribe shall determine, in consultation with the Applicant/Owner and the Qualified Archaeologist, the culturally appropriate treatment of those resources.

If the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor cannot agree on the significance or mitigation for such resources, these issues will be presented to the Planning Division Manager for decision. The Planning Division Manager shall make a determination based upon the provisions of CEQA and California Public Resources Code Section 21083.2(b) with respect to archaeological resources and California Public Resources Section 21704 and 21084.3 with respect to tribal cultural resources, and shall take into account the religious beliefs, cultural beliefs, customs, and practices of the TCA Tribe.

All sacred sites, significant tribal cultural resources, and/or unique archaeological resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible by the City as the Lead Agency, then the City shall require additional culturally

appropriate mitigation to address the negative impact to the resource, such as, but not limited to, the funding of an ethnographic study and/or a data recovery plan, as determined by the City in consultation with the Qualified Archaeologist and the TCA Tribe. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation and the drafting and finalization of any ethnographic study and/or data recovery plan, and/or other culturally appropriate mitigation. Any archaeological isolates or other cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site (or as otherwise agreed upon by the Qualified Archaeologist and TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the TCA Native American monitor.

If a data recovery plan is authorized as indicated above and the TCA Tribe does not object, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. If the Qualified Archaeologist collects such resources, the TCA Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the TCA Native American monitor may, at their discretion, collect said resources for later reburial or storage at a local curation facility, as described in the Pre-Excavation Agreement.

In the event that curation of archaeological resources or tribal cultural resources is required by a superseding regulatory agency, curation shall be conducted by an approved local facility within San Diego County and the curation shall be guided by California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections. The City shall provide the Applicant/Owner final curation language and guidance on the project grading plans prior to issuance of the grading permit, if applicable, during project construction. The Applicant/Owner shall be responsible for all repatriation and curation costs and provide to the City written documentation from the TCA Tribe or the curation facility, whichever is most applicable, that the repatriation and/or curation have been completed.

MM-CR-4 Human Remains: As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98.

If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be

protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by State law, the Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner recognizes the remains to be Native American, and not under his or her jurisdiction, then he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission will make a determination as to the Most Likely Descendent, who shall be afforded 48 hours from the time access is granted to the discovery site to make recommendations regarding culturally appropriate treatment.

If suspected Native American remains are discovered, the remains shall be kept in situ (in place) until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendent is identified, at which time the archaeological examination of the remains shall only occur on site in the presence of the Most Likely Descendent. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendant are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

3.4.7 Conclusion

Based upon the analysis presented in Section 3.4.4, the potential exists for impacts to previously unidentified archaeological resources during project grading. These potentially significant impacts to archaeological resources would be mitigated to below a level of significance through implementation of mitigation measures MM-CR-1 through MM-CR-3.

Specifically, implementation of these mitigation measures provides for the presence of archaeological and Native American monitors during ground disturbing activities that would be able to identify any previously unidentified cultural and/ or historical resources, to prevent inadvertent disturbance of any intact cultural deposits that may be present. Should any resources be identified, implementation of MM-CR-1 through MM-CR-3 would ensure proper handling and treatment of such resources by providing for a proper evaluation to determine whether additional archaeological work is necessary. To further ensure impacts to Native American archaeological resources are protected, implementation of MM-CR-1 through MM-CR-3 provides additional protections for significant resources, and describes the process for proper treatment and handling to ensure impacts are minimized.

Potential impacts to human remains would be mitigated through implementation of mitigation measure MM-CR-4, which specifies that remains shall not be further disturbed until the San Diego County Coroner has determined origins of the remains and final treatment has been agreed to with input of Native American Tribes, as necessary. Therefore, with incorporation of these measures, potential impacts to cultural resources would be reduced to below a level of significance.

3.5 Energy

Introduction

This section describes the existing setting of the project site with respect to energy use and conservation, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

Appendix G and Appendix F of the *California Environmental Quality Act (CEQA) Guidelines* requires that an environmental impact report (EIR) discusses the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy to ensure that energy implications are considered in project-related decision-making processes. As such, this section analyzes the energy impacts of the proposed project. Specifically, this section summarizes the existing conditions in the project area, discusses the regulatory framework, and discloses estimated energy use during the construction and operational phases of the proposed project. This analysis considers the electricity, natural gas, and transportation fuel (petroleum) demand of the proposed project.

The analysis is based on the following report, which is included as **Appendix F** of this document[6]:

- *Energy Usage Letter, Capalina Apartments Residential Development Project*, prepared by LDN Consulting, June 19, 2023 (LDN 2023b).

Table 3.5-1 summarizes the project- and cumulative-level energy impacts, by threshold.

Table 3.5-1. Energy Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Threshold #1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Threshold #2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.5.1 Existing Conditions

The environmental setting for the proposed project related to electricity, natural gas, and petroleum, including associated service providers, supply sources, and estimated consumption, is discussed below.

[6] Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Electricity

California uses more energy than all other states except Texas. However, due to the state's energy efficiency building standards and efficiency and conservation programs, California's energy use per capita is less than in almost all other states (except Hawaii). In 2022, California was the nation's fourth-largest electricity producer and accounted for about 5% of all U.S. utility-scale (1-megawatt and larger) power generation. Renewable resources, including hydropower and small-scale (less than 1-megawatt) customer-sited solar photovoltaic (PV) systems, supplied about half of California's total in-state electricity generation. In 2022, natural gas-fired power plants provided 42% of the state's total net generation. Coal fuels only a small amount of California's in-state net generation, all of it from one industrial cogeneration plant. California imports more electricity than any other state and typically receives between one-fifth and one-third of its electricity supply from outside of the state. In 2022, in-state utility-scale electricity generation equaled about four-fifths of California's electricity sales, and the rest of the state's supply came from out of state. Wildfires in California and surrounding states threaten both imports of electricity and transmission within the state (EIA 2023). California consumed 247,250 gigawatt hours of electricity in 2021 (EIA 2022).

San Diego Gas & Electric (SDG&E) provides electric and natural gas services to a population of 1.4 million business and residential accounts. SDG&E distributes energy service through 1.49 million electric meters and 905,000 natural gas meters in a 4,100-square-mile service area that includes San Diego County and southern Orange County (SDG&E 2022a). SDG&E is a subsidiary of Sempra Energy and would provide electricity to the proposed project.

The Path to Net Zero: A Decarbonization Roadmap for California (*Roadmap*) examines the implications to the State and SDG&E service area of transitioning to a carbon neutral (net zero emissions) economy by 2045, as mandated in the California Climate Crisis (See Section 3.5.2 Regulatory Setting below). Electricity is expected to play a central role in decarbonization. Clear priorities include the need to expand electrification and supplies of solar and wind power, invest in a diverse set of electric generation resources that will help ensure the electric grid is reliable and lastly, to provide much larger volumes of clean fuels.

Electrification is central to decarbonizing the transportation and building sectors. As such, electricity usage and demand is expected to increase. According to the *Roadmap*, the State of California can expect a 96% projected increase in electric consumption between 2020-2045 and a 60% projected increase in net peak demand for the same period. SDG&E projects approximately a 100% increase in electric consumption for its service area between 2020 and 2045 and an 85% increase in net peak demand. California had 85 gigawatt (GW) total capacity in 2020 and is projected to need 356 GW of capacity by 2045. As described in the California Air Resources Board (CARB) 2022 Scoping Plan for Achieving Carbon Neutrality, the scale of transformation needed over the next decade to avoid the worst impacts of climate change and meet ambitious climate goals is extraordinary. This is why Governor Newsom and the Legislature invested over $15 billion in climate action through the 2021/2022 California Comeback Plan, and why the 2022–2023 budget marks the beginning of the California Climate Commitment—the governor's multi-year plan to invest $54 billion in climate action. This plan includes $2.1 billion for clean energy investments, such as long duration storage, offshore wind, green hydrogen, and industrial decarbonization (CARB 2022). California is planning to expand and reinforce its electrical grid through investment and regional cooperation, increase in-state renewable energy as well as renewable energy imports, increase storage, particularly behind the meter PV storage, work toward changing consumer behavior (e.g., charging electric vehicles during the day when solar energy is available) and investing in development and implementation of technology that allow electric vehicles (EVs) to transmit energy back into the grid.

SDG&E believes meeting carbon neutrality will require installing 40 GW of new battery storage as well as 20 GW of dispatchable generation from 100% clean hydrogen generation by 2045. Moreover, in addition to existing natural gas generation, they believe that 4 GW of electricity from natural gas with carbon capture and sequestration will be needed to support reliability as the electric sector decarbonizes. Combined, these flexible resources can provide clean electricity when the sun is not shining and the wind is not blowing, and ensure that high electricity demand during the summer months can be reliably met (SDG&E 2022b). SDG&E's 2022 Individual Integrated Resource Plan (IIRP) is designed to meet key statutory requirements related to ensuring system reliability, reducing GHG emissions with the best-fit resources at the lowest possible cost, and satisfying the State's Renewables Portfolio Standard program goals. To that end, SDG&E is anticipating procuring 56% of its power from renewable resources for the 2021-2024 RPS Compliance Period, which is well above the State's 38.4% requirement.

Additionally, within SDG&E's service area, charging infrastructure will help to enable transportation electrification. SDG&E projects 900,000 EVs will operate in their service area in 2030 and 3,230,000 EVs in 2045. Similarly, 180,000 EV chargers are projected in SDG&E's service area in 2030 and 640,000 EV chargers are projected in 2045 (SDG&E 2022b).

Natural Gas

California is the nation's second-largest natural gas consumer (after Texas). Total natural gas consumption in 2021 totaled 2,101 billion cubic feet. In 2021, about 33% of the natural gas delivered to California consumers went to the state's industrial sector, and about 31% went to the electric power sector, where it fuels more than two-fifths of the state's total electricity generation. The residential sector, where three in five California households use natural gas for home heating, accounted for 22% of natural gas use, and the commercial sector consumed about 12%. The transportation sector used about 1% as compressed natural gas vehicle fuel. California's natural gas output has declined steadily since 1985, and the state now accounts for less than 1% of the nation's total natural gas reserves and production. California's natural gas production is less than one-tenth of the state's total consumption (EIA 2023).

The California Public Utility Commission (CPUC) regulates natural gas utility rates and services provided by Pacific Gas and Electric Company (PG&E), Southern California Gas Company, SDG&E, Southwest Gas, and several smaller natural gas utilities. SDG&E provides natural gas service to the Counties of San Diego and Orange and would provide natural gas to the proposed project. SDG&E is a wholesale customer of SoCalGas and currently receives all its natural gas from the SoCalGas system (CPUC 2021).

Petroleum

California is the nation's second-largest consumer of refined petroleum products, after Texas, and accounts for about 8% of U.S. total consumption. In 2021, California was the nation's largest consumer of jet fuel and the second-largest consumer of motor gasoline, after Texas. The transportation sector used about 83% of the petroleum consumed in the state. The industrial sector accounted for about 13% of state petroleum use, and the commercial sector consumed about 3%. The residential sector, where about 1 in 27 California households heat with petroleum products, mostly propane, used about 1%. A minimal amount of petroleum is used for electricity generation. Total petroleum consumption was estimated to be 605 million barrels. (EIA 2023).

Technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled (VMT). Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

California requires that motorists use, at a minimum, a specific blend of motor gasoline called CaRFG (California Reformulated Gasoline) to reduce emissions from motor vehicles. California refineries produce cleaner fuels in order to meet state environmental regulations. Refineries in the state often operate at or near maximum capacity because of the high demand for those petroleum products and the lack of interstate pipelines that can deliver those cleaner fuels into the state (EIA 2023).

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state. California is part of the West Coast Green Highway, an extensive network of electric vehicle DC fast charging stations located along Interstate 5, and the state has more than 14,000 public electric vehicle charging stations. As of December 31, 2021, California had more than 563,000 registered all-electric vehicles, the most of any state. California also requires all public transit agencies to gradually transition to 100% zero-emission bus (ZEB) fleets. Beginning in 2029, all transit agency new bus purchases must be ZEBs (EIA 2023). Further, Executive Order N-79-20 calls for elimination of new internal combustion passenger vehicles by 2035. By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they already own. The primary mechanism for achieving the Zero-Emission-Vehicle target for passenger cars and light trucks is the Advanced Clean Cars II Program discussed below in Section 3.5.2 Regulatory Setting.

As stated above SDG&E's Decarbonization Roadmap projects 900,000 EVs will operate in their service area in 2030 and 3,230,000 EVs in 2045. Similarly, 180,000 EV chargers are projected in SDG&E's service area in 2030 and 640,000 EV chargers are projected in 2045 (SDG&E 2022b).

Gasoline and other vehicle fuels are commercially provided commodities and would be available to the proposed project through commercial outlets.

Existing Infrastructure

The proposed project is within the SDG&E service area and would connect to the existing underground line at the project frontage with Capalina Road.

3.5.2 Regulatory Setting

Federal, state, and local agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency are three federal agencies with substantial influence

over energy policies and programs. On the state level, CPUC and California Energy Commission (CEC) are two agencies with authority over different aspects of energy. Relevant federal, state, and local energy-related regulations are summarized below. This information helps to place the impact analysis within its proper regulatory context.

Federal

Federal Energy Policy and Conservation Act (1975)

The Federal Energy Policy and Conservation Act established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act (2007)

The Energy Independence and Security Act of 2007 (EISA) aims to increase energy security, develop renewable energy production, and improve vehicle fuel economy. The following are provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum. The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as "RFS2" and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel, and set separate volume requirements for each one.

EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

State

The discussion below focuses primarily on those policies, regulations, and laws that directly pertain to energy-related resources. Refer to Section 3.7, Greenhouse Gas Emissions, of this EIR, which addresses various policies, regulations, and laws targeted to the reduction of GHG emissions that are expected to achieve co-benefits in the form of reduced demand for energy-related resources and enhanced efficiencies in the consumption of energy-related resources.

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided, and identified policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. In 2005, a second Energy Action Plan was adopted by the CEC and CPUC to reflect various policy changes and actions of the prior two years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based in part on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (2002) requires the California Energy Commission to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. (Pub. Res. Code § 25301(a)).

The CEC adopts an Integrated Energy Policy Report (IEPR, pronounced eye'-per) every two years and an update every other year. The most current report is the *2021 Integrated Energy Policy Report Update* which covers a broad range of topics, including building decarbonization, energy efficiency, challenges with decarbonizing California's gas system, quantifying the benefits of the Clean Transportation Program and the California Energy Demand Forecast. At the time of writing, the 2023 Update is currently in the review process.

California Renewables Portfolio Standards

Senate Bill 1078 (2002)

This bill established the California Renewables Portfolio Standards (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and

electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bills 107 (2006), X1-2 (2011), 350 (2015), and 100 (2018)

Senate Bill (SB) 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 set a three-stage compliance period: by December 31, 2013, 20% shall come from renewables; by December 31, 2016, 25% shall come from renewables; and by December 31, 2020, 33% shall come from renewables.

SB 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Greenhouse Gas Reduction

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, the California Air Resources Board (CARB) prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies and the use of renewable resources and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 3.7 of this EIR.

SB 375 Sustainable Communities and Climate Protection Act (2008)

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code, Section 65080, SB 375 requires metropolitan planning organizations (San Diego Association of Governments) to include a

Sustainable Communities Strategy in its regional transportation plan. The focus of the Sustainable Communities Strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also a part of a bigger effort to address other development issues within the general vicinity, including transit and VMT, which influence the consumption of petroleum-based fuels. Additional information on SB 375 is provided in Section 3.7 of this EIR.

Assembly Bill 1279, California Climate Crisis Act (September 2022)

This Bill requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85% compared to 1990 levels and directs CARB to work with relevant state agencies to achieve these goals.

Senate Bill 1020, 100% Clean Electric Grid (September 2022)

This bill creates clean electricity targets of 90% by 2035 and 95% by 2040 with the intent of advancing the state's trajectory to the existing 100% clean electricity retail sales by 2045 goal.

The 2022 CARB Scoping Plan for Achieving Carbon Neutrality

The 2022 Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic greenhouse gas emissions by 85% below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon. The plan calls for a need to take an unprecedented transformation and aggressively seek reductions to reduce the need of fossil fuels by moving to zero emission transportation, electrifying the cars, buses, trucks, and trains. The plan relays on external controls and requires partnership and collaboration with the federal government, other U.S. states, and other jurisdictions around the world for California to succeed in achieving its climate targets.

California Building Standards

Title 24 Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Because homes and businesses use nearly 70% of California's electricity and are responsible for a quarter of GHG emissions, the CEC was mandated to periodically update and adopt building standards to increase energy efficiency of buildings and reduce GHGs. Part 6 of Title 24 implemented this mandate so that every three years the CEC updates the Building Energy Efficiency Standards (Energy Code) for new construction and renovations to existing residential and non-residential buildings (CEC 2022).

The 2019 Title 24 standards were approved and adopted by the California Building Standards Commission in December 2018. The standards required that all low-rise residential buildings shall have a photovoltaic system meeting the minimum qualification requirements such that annual electrical output is equal to or greater than the dwelling's annual electrical usage. Notably, net energy metering rules limit residential rooftop solar generation to produce no more electricity than the home is expected to consume on an annual basis. Single-family homes built with the 2019 standards used about 7% less energy due to energy efficiency measures versus those built under the 2016 standards,

while new nonresidential buildings used about 30% less energy mainly to lighting upgrades (CEC 2018).

Energy Code

The 2022 Building Energy Efficiency Standards (Energy Code) improves upon the 2019 Energy Code for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 building code went into effect January 1, 2023 and focused on four key areas in new construction: encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality (CEC 2022).

California Green Building Standards Code (Title 24, Part 11).

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards required mandatory reduction in indoor and outdoor water use, diversion of demolition waste, mandatory inspections of energy systems, inclusion of electric vehicle charging stations for designated parking spaces and use of low-pollutant-emitting exterior and interior finish materials.

The current CALGreen standards were last updated in 2022 and went into effect January 1, 2023 and focuses on battery storage system controls, demand management, heat pump space and water heating, and building electrification. The 2022 CALGreen update eliminates the two-tiered menu of compliance prerequisites and enforces a single tiered menu of provisionary options. Mandatory requirements include many updated EV charging requirements for multi and single family developments.

State Vehicle Standards

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan (State Alternative Fuels Plan) to increase the use of alternative fuels in California. The CEC prepared the plan in partnership with CARB and in consultation with the other state, federal, and local agencies. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

AB 1493 (2002), EO S-1-07 (2007), and EO B-16-12 (2012)

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, AB 1493 was enacted in 2002. AB 1493 requires CARB to set GHG emission standards for passenger vehicles and EO S-1-07 sets a declining Low Carbon Fuel Standard to reduce the carbon intensity of California passenger vehicle fuels. EO B-16-12 supports and facilitates development and distribution of Zero Emissions Vehicles (ZEVs).

Advanced Clean Cars Program (2012 and 2022), EO N-79-20 (2020), and Clean Miles Standard and Incentive Program (2018)

In January 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015 through 2025 that combined standards for smog producing pollutants and greenhouse gases into one program. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide fuels for clean cars.

CARB's latest rule (2022) is known as Advanced Clean Cars II which continues the concept of increasing stringency for fuel-efficiency standards and increasing the number of ZEVs. California enjoys the largest zero-emission vehicle market in the nation with more than 16% of new vehicles sold being zero-emissions or plug-in hybrids. The regulations are two-pronged. First, it amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions (CARB 2023).

EO N-79-20 calls for elimination of new internal combustion passenger vehicles by 2035. By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they already own. The primary mechanism for achieving the ZEV target for passenger cars and light trucks is the Advanced Clean Cars II Program discussed above.

As part of the Executive Order, the Governor's Office of Business and Economic Development (GO-Biz) was tasked with preparing a Zero-Emission Vehicle Market Development Strategy along with the accompanying California State agency ZEV Action Plans.

In addition to the Advanced Clean Cars II, the Clean Miles Standard regulation will also help enable the goal of 100% ZEV sales in 2035 by creating demand for ZEVs. This regulation has aggressive requirements for electric miles that will transition ride-hailing fleets to zero-emission operations starting in 2023 and ramping up through 2030.

AB 2700, Transportation Electrification: Electrical Distribution and Grid Updates (2022)

This law will enable more strategic-grid planning and investment to ensure California has the grid it needs to accommodate widespread transportation electrification when needed to meet the state's carbon neutrality goals. With more-strategic planning and investment, AB 2700 will help ensure the electrification of the transportation sector is cost-effective, facilitates progress towards the state's goals, and maximizes benefits for all utility customers. Supported by a broad coalition of

environmental, equity, labor, fleet, utility, and EV charging organizations, AB 2700 directs utilities to conduct strategic grid planning and investment to ensure the grid is proactively prepared to accommodate all the new electric cars and trucks coming over the next decade thanks to state goals and regulations like the Advanced Clean Cars, Advanced Clean Trucks, and Advanced Clean Fleets rules. It requires fleet data already collected by state agencies to be shared with California utilities, so that they can use that data in their existing grid planning processes to better anticipate electricity demand and propose necessary upgrades.

Local

SDG&E Integrated Resource Plan

The Integrated Resource Planning ("IRP") process is the statewide approach to electric resource planning established by SB 350 that is intended to achieve California's GHG emissions reduction goals for the electric sector in a manner that preserves reliability and ensures reasonable cost. According to SDGE's 2022 Individual Integrated Resource Plan (IIRP), SDG&E supports the State's ambitious efforts to reduce GHG emissions and is committed to the State's vision of a clean energy future. In its study, The Path to Net Zero: A Decarbonization Roadmap for California, SDG&E lays out an implementable strategy for achieving statewide decarbonization while continuing to prioritize grid reliability, affordability, and equity. SDG&E's IIRP is designed to meet key statutory requirements related to ensuring system reliability, reducing GHG emissions with the best-fit resources at the lowest possible cost, and satisfying the State's Renewables Portfolio Standard program goals. To that end, SDG&E is anticipating procuring 56% of its power from renewable resources for the 2021-2024 RPS Compliance Period, which is well above the State's 38.4% requirement.

SDG&E's IIRP submits two Conforming Portfolios that achieve targets of 30 and 25 million metric tons (MMT) for the year 2035. SDG&E's Conforming Portfolios demonstrate that it is well positioned to achieve the State's climate and reliability goals under both the 25 MMT and 30 MMT benchmark scenarios. This advantage is due in part to the following:

- SDG&E's early compliance with RPS requirements, with around 56% of its energy mix expected from renewable resources in Compliance Period 4 (2021-2024);
- SDG&E's aggressive adoption of energy storage; and
- The absence of coal resources in SDG&E's portfolio.

While SDG&E's portfolio is primarily made up of solar and natural gas resources, SDG&E's modeling resulted in planned existing and new resources consisting primarily of solar, storage, and wind resources, with small amounts of demand response and firm, zero-emitting resources (e.g., geothermal). The total capacity of these planned existing and new resources in 2035 is 1,546 MW. SDG&E is fully compliant with RPS and long-term contracting requirements (SDG&E 2022a).

SDG&E Path to Net Zero

The Path to Net Zero: A Decarbonization Roadmap for California (*Roadmap*) examines the implications of the transition to net zero emissions for the state and the region that SDG&E serves. It also includes SDG&E's recommendation for California to achieve carbon neutrality and is the first publicly available analysis to use the industry standard for electric reliability and industry modeling software in modeling how to decarbonize California by 2045. Although the state reduced GHG emissions by ~36 MMT from 2009 to 2019, it will need to reduce emissions at 4.5 times the pace of historical reductions going forward to reach Net Zero by 2045. The *Roadmap* aims to advance current research on California's

decarbonization pathways. As many other studies have highlighted, electricity is expected to play a central role in decarbonization. Clear priorities include the need to expand electrification and supplies of solar and wind power, invest in a diverse set of electric generation resources that will help ensure the electric grid is reliable and lastly, to provide much larger volumes of clean fuels.

Electrification is central to decarbonizing the transportation and building sectors under the *Roadmap*. It is estimated that electric generation capacity will need to increase to 356 gigawatts (GW) by 2045 in California to meet this increasing demand for clean electricity, approximately four times the capacity that existed in 2020. The *Roadmap* foresees in-state solar and wind generation providing the bulk of this capacity. Wind and solar are excellent resources for providing low-cost clean energy, but to help ensure reliability, the California electric system must also develop more flexible resources, such as energy storage and clean dispatchable generation. This is especially important as the need for clean, reliable electricity increases from transportation and building electrification. SDG&E believes this will require installing 40 GW of new battery storage as well as 20 GW of dispatchable generation from 100% clean hydrogen generation by 2045. Moreover, in addition to existing natural gas generation, they believe that 4 GW of electricity from natural gas with carbon capture and sequestration will be needed to support reliability as the electric sector decarbonizes. Combined, these flexible resources can provide clean electricity when the sun is not shining and the wind is not blowing and ensure that high electricity demand during the summer months can be reliably met (SDG&E 2022b).

City of San Marcos General Plan

The City's General Plan (City of San Marcos 2012) includes various policies related to reducing GHG emissions and the co-benefit of reducing energy consumption. Applicable policies include the following:

Land Use and Community Design Element

- Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.
- Policy LU-2.3: Promote landscaping (e.g., native, drought tolerant plants) that minimizes demands on water supply.
- Policy LU-2.7: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.
- Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Conservation and Open Space Element

- Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.
- Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.
- Policy COS-4.8: Encourage and support the generation, transmission, and use of renewable energy.

Environmental Justice

- Policy EJ-1.13: Encourage energy conservation and the use of alternative energy sources within the community.
- Policy EJ-1.14: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.
- Policy EJ-1.15: Encourage and support the generation, transmission, and use of renewable energy.

The project's consistency with applicable General Plan goals and policies is discussed in Table 3.10-7 of Section 3.10, Land Use. As detailed in Section 3.10.4, the project is consistent with the applicable General Plan goals and policies pertaining to energy.

City of San Marcos Climate Action Plan

Consistent with AB 32, the City adopted a Climate Action Plan (CAP) in September 2013 as a long-range plan to reduce GHG emissions and mitigate climate change impacts associated with City government operations and with implementation of the City's General Plan. An updated CAP was adopted on December 8, 2020. The 2020 CAP builds on the efforts and strategies identified in the City's 2013 CAP, and establishes GHG emission targets and identifies achievable, locally based actions to reduce GHG emissions from municipal and community activities. Section 3.7, Greenhouse Gas Emissions provides more details on the CAP as it pertains to specific GHG reduction targets.

According to the CAP, energy use in the City includes electricity and natural gas consumption, which accounted for 39% of the City's total emissions in 2012. Two strategies would reduce emissions from electricity and natural gas consumption by increasing building energy efficiency and the use of renewable energy sources. Legislative reductions from State energy efficiency and renewable energy programs will contribute to reducing transportation emissions by increasing the amount of renewable energy available statewide and improving energy efficiency requirements for new developments. At the local level, GHG emissions reductions would be achieved by improving energy efficiency of new developments beyond State requirements, both increasing the amount of renewable energy generated locally, and reducing the amount of non-renewable energy consumed locally. The success of these strategies relies on coordination with local utilities, organizations, and agencies, participation from the community, and administration of new or revised local policies and programs.

The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. Strategies and measures related to energy include the following:

- Strategy 4: Increase Building Energy Efficiency Electricity and natural gas consumption in buildings accounts for a majority of GHG emissions from the energy sector. Although legislative reductions related to State actions will help reduce emissions associated with building energy, additional reductions are achievable by increasing building efficiency in the City. This strategy aims to reduce emissions by reducing energy used by residential consumers through increased energy efficiency. This strategy includes one measure that would reduce the City's emissions by approximately 1,280 $MTCO_2e$ in 2030.
    - Measure E-1: Require New Residential Developments to Install Alternatively-Fueled Water Heaters. Starting in 2022, require all new single-family and multi-family residential projects

to install non-natural gas water heaters. Non-natural gas water heater options include electric HPWH, instantaneous electric, electric tank solar water heater with HPWH backup, or solar water heater with electric tank backup

- Strategy 5: Increase Renewable and Zero-Carbon Energy: Over a quarter of the City's GHG emissions in 2012 were generated through the consumption of fossil fuels for the purpose of electricity generation (i.e., natural gas—fired or coal power plants). Transitioning from fossil fuels to renewable energy electricity generation will reduce emissions and provide a more sustainable source of electricity. The City would reduce emissions by increasing renewable energy generated locally and participating in a community choice aggregation (CCA) or similar program to increase the amount of grid supplied renewable energy. This strategy includes two measures that would reduce the City's emissions by approximately 35,100 $MTCO_2e$ in 2030. Additional activities that would support this strategy would occur through partnerships with local and regional agencies.
    - Measure E-2: Require Installation of PV systems at New Non-Residential Developments. Starting in 2022, require all new non-residential developments to install PV systems with a minimum of two watts per square foot of gross floor area.
    - Measure E-3: Increase Grid-Supply Renewable and Zero-Carbon Electricity. Join a program to increase grid-supply renewables and zero-carbon electricity to 95% by 2030 with a maximum customer opt-out rate of 3%.

3.5.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to energy if it would:

- Threshold #1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Threshold #2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.4 Project Impact Analysis

Threshold #1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project proposes up to 119 multi-family residential units and 4,000 square feet (s.f.) of commercial use within two four-story buildings situated on approximately 2.51 gross acres. Additionally, electric vehicle (EV) parking is incorporated in the project parking and includes 8 spaces with Level 2 EV chargers, 15 EV capable spaces and 36 EV ready spaces. The project seeks a General Plan Amendment (GPA) and rezone of the project site from Mixed Use 3 SP (MU-3 (SP)) to Mixed Use (MU-2).

The General Plan Land Use designation for the project site is Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a maximum floor area ratio (FAR) of 1.50. A constructible concept plan for buildout of the site under the existing Land Use designation was prepared for comparison purposes. The MU3 General Plan Buildout scenario is assumed to include construction of a multi-story office building consisting of 90,000 s.f. of office use, 10,000 s.f. of retail use and 400 parking spaces.

The total area including the parking would have a total gross floor area of 158,000 s.f. and would have a FAR of 1.5. The Energy Usage Letter prepared for the proposed project includes analysis of energy use during construction and operation of the proposed project as well as a comparison of energy use under the proposed project with energy use anticipated under the General Plan Buildout scenario (LDN 2023b).As explained in more detail below, the Energy Usage Letter concluded that implementation of the proposed project would not result in wasteful, inefficient, or unnecessary impacts related to electricity, natural gas or petroleum during construction or operations and impacts would be **less than significant.**

Construction

Construction of the proposed project is expected to occur over a 10 to 11-month duration. Grading for the project will consist of approximately 4,030 cubic yards (cy) of cut material and 12,270 cy of fill material requiring an import of approximately 8,240 cy of fill material. For the purposes of a conservative comparison, these construction assumptions are anticipated to be the same for the General Plan Buildout scenario.

Electricity

Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers and heating, ventilation, and air conditioning) would be provided by SDG&E. The amount of electricity used during project construction would be minimal because typical demand stems from the use of electronic equipment, in addition to electrically powered hand tools. As the electricity used for construction activities would be temporary and minimal, impacts related to electricity consumption during project construction are determined to be **less than significant.**

Natural Gas

Natural gas is not anticipated to be required during construction of the proposed project. Any minor amounts of natural gas that may be consumed as a result of construction would be temporary and negligible and would not have an adverse effect on the environment; therefore, impacts would be **less than significant.**

Petroleum

The majority of the energy used during construction would be from petroleum. Energy usage for construction equipment is best estimated using total horsepower hours (HP-h) and an assumed thermal efficiency of 30%. Based on the equipment, quantity, work time, and horsepower, the project would require a total of 477,570 hp-h as shown in **Table 3.5-2**. Based on this, the project would consume roughly 28,944 gallons of diesel for construction. The project would require essentially the same energy during construction as the MU3 General Plan Buildout scenario. Proper maintenance of all construction equipment per manufacturer recommendations is included as a project design feature.

Construction energy from workers, vendors and haulage are based on the estimated VMT for the total construction duration which is 438,141 miles for the proposed project. In California, the average fuel economy for on-road vehicles is 24.1 miles per gallon or 0.0415 gallon per mile. Based on this, the vehicular trips would consume roughly 18,183 gallons during construction (LDN 2023b).

In total, construction of the project is estimated to consume a total of 47,127 gallons of petroleum from off-road equipment and worker vehicle and vendor truck trips during the construction phase. Within the County, the estimated petroleum use in 2024 would be 1.5 billion gallons per year (CARB 2022b). On-road vehicles are regulated by state and federal regulations and vehicular fleet efficiencies are improving each year. Additionally, all construction equipment shall be maintained as needed per manufacturer recommendations. The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Since the projected energy usage of the project and the General Plan Buildout scenario would be essentially the same, the project would not consume more energy than would otherwise be consumed through the construction of the General Plan Buildout scenario. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. Therefore, because petroleum use during project construction would be temporary and minimal and would not be wasteful or inefficient, impacts related to energy use during construction would be **less than significant.**

Table 3.5-2 Proposed Construction Phase and Duration Equipment

Equipment Identification	Construction Days	Hours per Day	Horsepower (HP)	Load Factor	Quantity	Horsepower Hours (HP-h)
Site Preparation	3					
Graders		8	187	0.41	1	1,840.08
Scrapers		8	367	0.48	1	4,227.84
Tractors/ Loaders/ Backhoes		7	97	0.37	1	753.69
Grading	6					
Graders		8	187	0.41	1	3,680.16
Rubber Tired Dozers		8	247	0.4	1	4,742.40
Tractors/ Loaders/ Backhoes		7	97	0.37	1	1,507.38
Building Construction	220					
Cranes		8	231	0.29	1	117,902.40
Forklifts		7	89	0.2	2	54,824.00
Generator Sets		8	84	0.74	1	109,401.60
Tractors/ Loaders/ Backhoes		6	97	0.37	1	47,374.80
Welders		8	46	0.45	3	109,296.00
Paving	10					
Pavers		8	130	0.42	1	4,368.00
Paving Equipment		8	132	0.36	1	3,801.60

Equipment Identification	Construction Days	Hours per Day	Horsepower (HP)	Load Factor	Quantity	Horsepower Hours (HP-h)
Rollers		8	80	0.38	2	4,864.00
Architectural Coating	40					
Air Compressors		6	78	0.48	1	8,985.60
Total Horsepower Hours						**477,569.55**
Total Diesel Fuel (Gal) @ 16.5 hp-h/gal						**28,944**

Source: LDN 2023b.
Notes: The equipment list is based upon equipment inventory and estimates within CalEEMod 2020.4.0

Operations

Electricity

The operation of the project would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage.

The electrical energy usage expected to be utilized by the project was compared to the General Plan Buildout scenario in **Table 3.5-3**. Based on the results, the project would consume 527,277 kilowatt hours (kWh) per year, which is 1,324,523 kWH less than would be consumed under the General Plan Buildout scenario. California consumed 247,250 gigawatt hours of electricity in 2021 (EIA 2022) and consumption is expected to increase as a result of electrification of the building and transportation sectors needed to meet ambitions climate goals. To meet these goals, the State has created a multi-year plan to invest $54 billion in climate action including clean/renewable energy investments, expansion and reinforcement of the energy grid and increasing energy storage (CARB 2022a). The project would also implement applicable City CAP measures that would reduce operational electricity consumption, including installing electric water heaters. While this would increase electricity use, it would result in less natural gas use and is more efficient than heating water with natural gas as 15% of the energy is lost in the exhaust. Reductions from implementation of the City's CAP measures were not included in the calculations in Table 3.5-3. Reductions from Title 24 of the California Building Code (2019) were accounted for in the calculations and would improve the efficiency of the project in terms of energy consumption. The 2022 Title 24 standards have not yet been included into CalEEMod 2020.4.0 but would essentially reduce energy consumption for both scenarios.

Table 3.5-3 Annual Energy Use for Proposed Project and MU3 General Plan Buildout Scenario

Energy Source	Proposed Project	MU3 General Plan Buildout Scenario	Difference
Natural Gas Usage (kBTU/Year)	874,730	1,824,900	-950,170
Electrical Usage (kWH)	527,277	1,851,800	-1,324,523

Source: LDN 2023b.
Notes: kBTU = One thousand British Thermal Units
kWH= Kilowatt Hours

In summary, although electricity consumption would increase at the project site due to project implementation, the project would be required to comply with Title 24 and the City's CAP by implementing energy-efficiency measures. Furthermore, the project would be subject to the Title 24 building code that is adopted at the time building permits are obtained and thus may be subject to a more stringent energy standard than what was assumed herein. Additionally, the project would consume less electricity compared to the General Plan Buildout scenario. For these reasons, electricity consumption of the project would not be considered inefficient, wasteful, or unnecessary, and impacts would be **less than significant.**

Natural Gas

The natural gas usage expected to be utilized by the project was compared to the General Plan Buildout scenario in Table 3.5-3. Based on the results, the project would be expected to consume 874,730 thousand British thermal units (kBTU) per year, which is 950,170 kBTU less than would be consumed under the General Plan Buildout scenario. As previously discussed, the project would be subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Prior to building permit application, the applicant would ensure that project plans would meet Title 24 requirements applicable at that time, as required by state regulations, through their plan review process. Additionally, the project would implement the City's CAP measure that reduces operational natural gas consumption, which requires the installation of electric water heaters.

In summary, although natural gas usage would increase due to project implementation, project design features would be implemented, and usage would be decreased through green building standards. Additionally, the project would consume less natural gas compared to the General Plan Buildout scenario. For these reasons, the natural gas consumption of the project would not be considered inefficient or wasteful, and impacts would be less than significant.

Petroleum

Vehicle travel to and from the project site would be the largest contributor to petroleum use. The project would generate 874 average daily trips (ADT), which is 1,326 ADT less than the 2,200 ADT anticipated under the General Plan Buildout scenario. This reduction would be a 60% reduction in trips and fuel requirements. Over the lifetime of the proposed project, the fuel efficiency of the vehicles being used by residents is expected to increase. As RPS increases and as electric vehicle operations become more standardized, energy consumption and efficiency will decrease. Additionally, EV parking is incorporated in the project parking plan and includes 8 spaces with Level 2 EV chargers, 15 EV capable spaces and 36 EV ready spaces. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time.

In summary, although the project would increase petroleum use during operation, the use would be a small fraction of the statewide use (605 million barrels) and due to efficiency increases, would diminish over time. Additionally, the proposed project would use less petroleum during operation than the General Plan Buildout scenario would. Given these considerations, petroleum consumption associated with the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be **less than significant.**

Threshold #2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction

The majority of the energy used during construction would be from petroleum. On-road vehicles are regulated by state and federal regulations and vehicular fleet efficiencies are improving each year. Additionally, all construction equipment shall be maintained as needed per manufacturer recommendations. The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Therefore, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be **less than significant**.

Operation

Section 3.5.2 includes a description of all the federal, state, and local policies and programs that the project would be required to comply with. The proposed project would follow applicable energy standards and regulations during the construction phases. The proposed project would be built and operated in accordance with all existing, applicable building regulations at the time of construction, including Title 24 Building Standards, Building Energy Efficiency Standards (Energy Code), and California Green Building Standards. Furthermore, the proposed project would be consistent with all actions in the CAP Consistency Review Checklist, many of which reduce the usage of non-renewable energy, as discussed in detail in Section 3.7, Greenhouse Gas Emissions, and Appendix I of this EIR. **Table 3.5-4** describes the CAP measures that are applicable to a multi-family residential project and how the proposed project will comply. As shown, the project provides electric vehicle parking, including 8 spaces with Level 2 EV chargers, 15 EV capable spaces and 36 EV ready spaces, which will help meet state goals toward carbon neutrality and elimination of new internal combustion passenger vehicles. For the reasons stated, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be **less than significant**.

Table 3.5-4. Project Consistency with Applicable CAP Checklist Measures

CAP Consistency Checklist Measures	Project Compliance
Electric Vehicle Charging Stations (Measure T-2) Will the project install electric vehicle charging stations (Level 2 or better) in at least five percent of the total parking space provided on-site?	The project proposes a total of 147 on-site parking spaces and 8 of those will provide Level 2 electric vehicle charging stations. The project also includes 15 EV capable spaces and 36 EV ready spaces. The project has been designed to meet the requirements of Measure T-2.
Transportation Demand Management (Measure T-9) Will the project develop and implement a TDM plan that includes, at minimum, all of the TDM strategies listed below? Provide discounted monthly transit pass or provide at least 25 percent transit fare subsidy to residents/employees. Provide designated car-share, carpool, vanpool, and/or park-and-ride parking spaces.	**Transit Discount:** The property manager will provide transit information to the owners and make a good faith effort in offering discounted transit fares. The property management company will provide a newsletter to inform the residents there are options for reduced transit passes. **Designated Parking**: The project will provide designated car-share, carpool, vanpool, EV and/or park-and-ride spaces on site. **Pedestrian Connections:** The project proposes sidewalks along the project frontage along

CAP Consistency Checklist Measures	Project Compliance
Provide pedestrian connections between all internal uses and to all existing or planned external streets around the project site(s). Provide secure bicycle parking spaces or bicycle racks, showers, and clothes lockers. Encourage telecommuting for employees (allow one telecommute day per week or compressed work weeks) or provide a telecommute work center with common office space and equipment available to residents.	Capalina Road. Sidewalks are also proposed surrounding the main building and recreational area providing direct access to the dwelling units, fitness center, leasing office, and retail land use component of the proposed project. Lastly, sidewalks are proposed along the south and west side of the buildings on the north side of the property connecting directly to existing sidewalk facilities along West Mission Road. **Bicycle Spaces:** The project will provide bicycle racks and residents will have access to showers and secure bicycle storage within each of their residences. Additionally, adjacent to the fitness center, as part of the onsite restrooms, a shower and two sets of bike racks will be provided on site. **Telecommuting**: The project will have space available in the community room for residents to telecommute. Each residence will also have a suitable area for telecommuting. Additionally, the project will have common office space as part of the commercial portion that will promote telecommuting. The project has been designed to meet the requirements of Measure T-9.
Water Heaters (Measure E-1) Will the project install one of, or a combination of, the following water heater types in place of natural gas heaters?	The project will install electric tank water heaters within all units. Natural gas water heaters will not be used. The project has been designed to meet Measure E-1.
Photovoltaic Installation (Measure E-2) Will the project install photovoltaic systems with a minimum capacity of two watts per square foot of gross floor area?	The project will install photovoltaic systems with a capacity of two watts per square feet of gross floor area. The project has been designed to meet Measure E-2.
Landscaping Water Use (Measure W-1) Will the project comply with the City's Water Efficient Landscape Ordinance?	The project will comply with the City's Water Efficient Landscape Ordinance. The project has been designed to meet Measure W-1.
Urban Tree Canopy (Measure C-2) For multi-family residential, if the project is providing more than 10 parking spaces, will the project plant at least one tree per five parking spaces provided?	The project proposes 147 parking spaces, which would require 29 trees to meet the requirements of Measure C-2. Per the landscape concept plan, the project will plant 82 trees. The project exceeds the requirements of Measure C-2.

3.5.5 Cumulative Impact Analysis

Potential cumulative impacts on energy would result if the proposed project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation. The cumulative projects within the areas serviced by the energy service

providers would be applicable to this analysis; this includes existing aging structures that are energy inefficient. Projects that include development of large buildings or other structures that would have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would typically not involve substantial ongoing energy use.

As described previously, the proposed project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary use of energy due to various design features and adherence to applicable requirements. Similar to the proposed project, the cumulative projects would be subject to CALGreen, which provides energy efficiency standards for commercial and residential buildings. CALGreen would implement increasingly stringent energy efficiency standards that would require the proposed project and the cumulative projects to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, further reducing the inefficient use of energy. Future development would also be required to meet even more stringent requirements, including the objectives set in the AB 32 Scoping Plan. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Advanced Clean Cars Program and Clean Miles Standard would serve to reduce the transportation fuel demand of cumulative projects. In consideration of cumulative energy use, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Thus, the proposed project would not contribute to a cumulative impact to the wasteful or inefficient use of energy. As such, the proposed project would not result in a cumulatively considerable contribution to a potential cumulative impact. **Impacts are less than significant.**

3.5.6 Mitigation Measures

Impacts would be less than significant, and no mitigation measures are required.

3.5.7 Conclusion

The Energy Usage Letter prepared by LDN (2023b) included a comparative analysis of energy use that would be consumed by the proposed project and the General Plan Buildout scenario (which is the site's existing land use.) The analysis demonstrated that energy use during construction would be temporary and minimal and would likely be the same under either land use scenario. The proposed project would comply with regulatory requirements and building standards as well as ensuring that all construction equipment is maintained per manufacturer's specifications. As such, the proposed project would not result in the wasteful or inefficient use of electricity, and impacts would be less than significant.

The analysis concluded that while operations of the proposed project would consume more energy at the project site under existing conditions, the project would be required to comply with Title 24 and the City's CAP by implementing energy efficiency measures. Additionally, the project would use less energy – both in terms of electricity/natural gas and petroleum use – when compared to the General Plan Buildout scenario. For these reasons, energy consumption of the project would not be considered inefficient, wasteful, or unnecessary, and impacts would be **less than significant.**

Additionally, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing energy consumption, including the City's General Plan policies. As a result, impacts would be **less than significant.**

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3.6 Geology and Soils

Introduction

This section analyzes the potential for impacts related to geology and soils for the proposed project, including seismic activity, liquefaction, landslides, loss of topsoil, soil erosion, soil stability and soil expansion.

The following report has been prepared to help analyze the geological and geotechnical impacts of the proposed project and is included in its entirety in **Appendix G** of the Environmental Impact Report (EIR):

Due Diligence Geotechnical Study – Proposed Capalina Apartments, APN 466120002, Capalina Road east of North Rancho Santa Fe, San Marcos, California. Prepared by Advanced Geotechnical Solutions, Inc. (AGS). Dated May 13, 2022

In the Initial Study checklist prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact associated with the ability of soils to support the use of septic or alternative wastewater systems, as no septic or alternative wastewater systems are included as part of the project. Since the proposed project would be served by Vallecitos Water District for sewer service, no septic or alternative wastewater systems are proposed. Section 5.5, Environmental Effects Found Not to be Significant – Geology and Soils, of this EIR provides additional information on these topics.

A summary of the project- and cumulative-level geology and soils analysis, by threshold, is provided in **Table 3.6-1.**

Table 3.6-1. Geology and Soils Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative Level Impact	Impact After Mitigation
#1 - Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4 - Directly or indirectly cause potential substantial adverse effects, including the	Less than Significant	Less than Significant	Less than Significant

Threshold of Significance	Project-Level Impact	Cumulative Level Impact	Impact After Mitigation
risk of loss, injury, or death involving landslides?			Without Mitigation
#5 - Result in substantial soil erosion or the loss of topsoil?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#6 - 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#7 - 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#8 - Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant	Less than Significant	Mitigated to Less than Significant

3.6.1 Existing Conditions

This section details the existing conditions on the project site including topography, soils, groundwater, and the project site's location to major faults.

Topography

The project site is located south of W. Mission Road and north of Capalina Road in San Marcos, California. The site is undeveloped and surrounded by commercial development to the west and east and roads to the north and south. The site is somewhat level, separated into an upper and lower pad, with a 5- to 6-foot high gentle slope running north-south that separate the two pads. Elevations range from approximately 580 feet near the southwest corner to 600 feet near the northeast corner. The site is currently vacant and is covered with seasonal grasses (AGS 2022).

Soils

Regionally, the project site is situated within the Peninsular Ranges Geomorphic Province. The Peninsular Ranges province occupies the southwestern portion of California and extends southward to the southern tip of Baja California. In general, the province consists of young, steeply sloped, northwest trending mountain ranges underlain by metamorphosed Late Jurassic to Early Cretaceous-aged extrusive volcanic rock and Cretaceous-aged igneous plutonic rock of the Peninsular Ranges Batholith. The westernmost portion of the province is predominantly underlain by younger marine and non-marine sedimentary rocks. The Peninsular Ranges' dominant structural feature is northwest-southeast trending crustal blocks bounded by active faults of the San Andreas transform system (AGS 2022).

The earth materials present at the site consist of surficial deposits of undocumented artificial fill and topsoil/alluvium overlying sedimentary rock assigned to the Santiago Formation. The site is geologically mapped as sitting near the boundary of the Santiago Formation and undifferentiated metasedimentary and metavolcanic rock although metasedimentary / metavolcanic rock was not encountered during the geotechnical study. The following is a brief description of the subsurface materials encountered (AGS 2022).

Artificial Fill - Undocumented

Artificial fill soils mantle portions of the site. These soils consist of light brown to red and orange brown silty sand with some angular pieces of rock observed in a few test pits. These materials may be related to the spreading of the end dump piles on the site or previous grading activities on the site. Deeper deposits were observed near the slope along the westerly side of the site and may be related to offsite grading activities or the previous installation of the offsite water lines. The fill materials were generally observed to be dry to slightly moist and loose with abundant roots.

Topsoil/ Alluvium (Undifferentiated)

One to five feet of topsoil/alluvium was observed to overlie the Santiago Formation. These materials consist of brown to dark brown clayey sands and sandy clays in a dry to moist and loose/soft to medium dense / firm condition.

Santiago Formation

Middle Eocene age sedimentary rock assigned to the Santiago Formation was observed to underlie the project site below the fill and topsoil material. The depth to the Santiago Formation ranged from approximately 2 to 8 feet below the existing surface. The formation consisted of soft to moderately hard interbedded silty sandstone, clayey sandstone, and sandy claystone. The unit was observed to be soft and highly weathered in the upper two feet and slightly less weathered below. Abundant iron oxide staining and carbonate development were observed.

Groundwater

Groundwater was not encountered to the maximum depths explored. Localized perched groundwater may develop at a later date, most likely at or near fill/bedrock contacts, due to fluctuations in precipitation, irrigation practices, or factors not evident at the time of AGS field explorations.

Seismicity

The project site is located in tectonically active southern California and would likely experience shaking effects from future earthquakes. The type and severity of seismic hazards affecting the site are to a large degree dependent upon the distance to the causative fault, the intensity of the seismic event, and the underlying soil characteristics. The seismic hazard may be primary, such as surface rupture and/or ground shaking, or secondary, such as liquefaction or dynamic settlement.

Surface Fault Rupture

Surface fault rupture is a break in the ground surface during, or as a consequence of, seismic activity. Fault rupture occurs most often along pre-existing fault traces. Based on literature review and aerial photographic analysis performed during the geotechnical investigation, no known active faults have been mapped at or near the subject site. The nearest known active surface fault is the Newport-

Inglewood - Rose Canyon fault zone which is approximately 11.5 miles west - southwest of the subject site. Accordingly, the potential for fault surface rupture on the subject site is very low (AGS 2022).

Liquefaction

Liquefaction is the phenomenon in which the buildup of excess pore pressures, in saturated granular soils due to seismic agitation, results in a temporary "quick" or "liquefied" condition. Dependent upon the thickness of undocumented fill and the existing water table, the liquefaction potential would be evaluated for the site. The underlying sedimentary rock is not considered susceptible to liquefaction. Upon conclusion of remedial grading, the site is not considered susceptible to liquefaction (AGS 2022). The project site is identified as having Zero to Low Susceptibility for liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (2012).

Dynamic Settlement

Dynamic settlement occurs in response to an earthquake event affecting loose sandy earth materials. The potential of dynamic settlement at the subject site is anticipated to be "very low" due to the presence of the shallow sedimentary rock (AGS 2022).

Lateral Spreading

Liquefaction-induced lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore pressure build-up or liquefaction in a shallow underlying deposit during an earthquake. Since the potential for liquefaction is very low, the potential for lateral spreading is also very low (AGS 2022).

Seismically Induced Landsliding

Significant slopes are not located adjacent to the site. The shallow slope along the west side of the property line is not expected to be prone to seismically induced landsliding. Seismically induced landsliding is not considered to be a hazard at the site.

Earthquake Induced Flooding

Earthquake induced flooding can be caused by tsunamis, dam failures, or seiches. A seiche is a free or standing-wave oscillation on the surface of water in an enclosed or semi-enclosed basin. Due to the lack of a freestanding body of water nearby, the potential for a seiche impacting the site is considered to be non-existent. Considering the lack of dams located above the site, earthquake induced flooding caused by a dam failure is considered to be nonexistent. AGS review of the 2009 Tsunami Inundation Map for Emergency Planning prepared by the California Emergency Management Agency, indicates that the site is not within the tsunami inundation limits.

Paleontological Resources

The project site lies within the Peninsular Ranges Geomorphic Province of southern California. This province consists of a series of ranges separated by northwest trending valleys; subparallel to branches of the San Andreas Fault. The Peninsular Ranges geomorphic province is one of the largest geomorphic units in western North America, extends from the Transverse Ranges geomorphic province and the Los Angeles Basin, south to Baja California. It is bound on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province. Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Major fault zones and

subordinate fault zones found in the Peninsular Ranges Province typically trend in a northwest-southeast direction.

Within the Peninsular Ranges Geomorphic Province, the project site lies within the Peninsular Ranges Region. This region is primarily underlain by plutonic igneous rocks that formed from the cooling of molten magmas deep within the earth's crust. These magmas were generated during subduction of an oceanic crustal plate that was converging on the North American Plate between 120 and 90 million years ago. Over this long period of time, extensive masses of plutonic rocks accumulated within the crust. Intense heat associated with these plutonic intrusions metamorphosed the ancient sedimentary rocks that were already there. These metasediments are now preserved in the Peninsular Ranges Region as marbles, slates, schist, quartzites, and gneiss. Younger undeformed sedimentary rocks occur in various areas of the Peninsular Ranges Region. The Peninsular Ranges Region contains paleontological resources in Quaternary alluvial and alluvial fan deposits in many of the mountain valleys (County of San Diego 2009).

According to the Preliminary Geotechnical Evaluation prepared for the project (AGS 2022), the geologic conditions underlying the site consist of undocumented artificial soils, and topsoil/alluvium. Middle Eocene age sedimentary rock assigned to the Santiago Formation was observed to underlie the project site below the fill and topsoil material. The site is geologically mapped as sitting near the boundary of the Santiago Formation and undifferentiated metasedimentary and metavolcanic rock although metasedimentary / metavolcanic rock was not encountered during the geological study (AGS 2022). The site is also mapped as including Young Alluvial Flood Plain deposits from the Holocene and late Pleistocene. The Eocene epoch is part of the Tertiary Period in the Cenozoic Era, and lasted from about 56 to 34 million years ago. The Quaternary Period is divided into two epochs: the Pleistocene (2.588 million years ago to 11.7 thousand years ago) and the Holocene (11.7 thousand years ago to today).

According to the *County of San Diego Guidelines for Determining Significance of Paleontological Resources*, sedimentary rock units in the Peninsular Ranges Region may have the potential to contain paleontological resources (County of San Diego 2009).

3.6.2 Regulatory Setting

This section describes the federal, state, and local regulations related to geology and soils.

Federal

Federal Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 provides a set of mitigation plan requirements that emphasize State and local jurisdictions to coordinate disaster mitigation planning and implementation. States are encouraged to complete a “Standard” or an “Enhanced” Natural Mitigation Plan. “Enhanced” plans demonstrate increased coordination of mitigation activities at the State level, and if completed and approved, will increase the amount of funding through the Hazard Mitigation Grant Program. California’s updated State Hazard Mitigation Plan was adopted and approved by the Federal Emergency Management Agency (FEMA) Region IX in 2007. The City of San Marcos is one of the communities covered by the 2023 County of San Diego Multi-Jurisdictional Hazard Mitigation Plan, which is a countywide plan that identifies risks posed by natural and manmade disasters.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

USGS Landslide Hazard Identification Program

The United States Geological Survey (USGS), in fulfillment of the requirements of Public Law 106-113, created the National Landslide Hazards Program to reduce long-term losses from landslide hazards by improving understanding of the causes of ground failure and suggesting mitigation strategies. FEMA is the responsible agency for the long-term management of natural hazards.

International Building Code

The International Building Code (IBC) is a model building code developed by the International Code Council that provides the basis for the CBC. The purpose of the IBC is to provide minimum standards for building construction to ensure public safety, health, and welfare. Prior to the creation of the IBC, several different building codes were used; however, by the year 2000, the IBC had replaced these previous codes and is updated every three years. The 2021 IBC code is currently in effect.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act is the State law that focuses on hazards from earthquake fault zones. The purpose of this law is to mitigate the hazard of surface fault rupture by regulating structures designated for human occupancy near active faults. As required by the act, the California Geological Survey has delineated Earthquake Fault Zones along known active faults in California.

California Geologic Survey

The California Geologic Survey provides guidance with regard to seismic hazards. The California Geologic Survey's Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (2008), provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigation.

California Surface Mining and Reclamation Act

Enacted to promote conservation and protection of significant mineral deposits, the California Surface Mining and Reclamation Act requires that all cities address in their General Plans the significant aggregate resources classified by the State Geologist and designated by the State Mining and Geology Board. The law also ensures that significant aggregate resources are recognized and considered before land use decisions are made that may compromise the availability of these resources.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was enacted in 1997 to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to map areas subject to seismic hazards. A geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design before development permits will be granted. Additionally, the Act requires a Standardized Natural Hazards Disclosure Statement form be completed by real estate sellers if a property is within one of the designated natural hazards areas.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act (effective June 1, 1998), requires "that sellers of real property and their agents provide prospective buyers with a 'Natural Hazard Disclosure Statement' when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone." SHMA specifies two ways in which this disclosure can be made:

- The Local Option Real Estate Transfer Disclosure Statement as provided in Section 1102.6a of the Civil Code; or
- The Natural Hazard Disclosure Statement as provided in Section 1103.2 of the Civil Code.

The Local Option Real Estate Disclosure Statement can be substituted for the Natural Hazards Disclosure Statement if it contains substantially the same information and substantially the same warning as the Natural Hazards Disclosure Statement. Both the Alquist-Priolo Act and the SHMA require that real estate agents, or sellers of real estate acting without an agent, disclose to prospective buyers that the property is located in an Alquist-Priolo Earthquake Fault Zone or Seismic Hazard Mapping Zone.

California Uniform Building Code

The California Code of Regulations (CCR), also known as Title 24, California Building Standards Codes contain the laws regarding the construction of buildings. Title 24, Part 2 of the California Uniform Building Code (UBC) specifies standards for geologic and seismic hazards, other than surface faulting. Chapter 23 of the California UBC addresses seismic safety, and includes regulations for earthquake-resistant design and construction. The 2022 Triennial Edition of the Title 24, California Building Standards Code went into effect January 1, 2023.

Local

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

To comply with the Disaster Mitigation Act of 2000, the County of San Diego prepared the Multi-Jurisdictional Hazard Mitigation Plan in 2010. The plan serves as both a county-wide plan and a plan for local jurisdictions that identifies risks posed by natural and human-made disasters before a hazard event occurs. This plan was last revised in 2023 to reflect changes to both the hazards threatening San Diego County, as well as the programs in place to minimize or eliminate those hazards. The plan includes overall goals and objectives shared by many jurisdictions, as well as specific goals, objectives, and mitigation action items for each of the participating jurisdictions, including the City of San Marcos, developed to help minimize the effects of the specified hazards that potentially affect their jurisdiction.

San Marcos General Plan Safety Element

The Safety Element of the San Marcos General Plan contains several policies pertaining to natural geologic hazards. The following goal and policies apply to the project:

- Goal S-1: Reduce risks to the community from earthquakes by regulating new development and redevelopment to prevent the creation of new geologic and seismic hazards.
    - Policy S-1.1: Reduce the risk of impacts from geologic and seismic hazards by applying current and proper land use planning, development engineering, building construction, and retrofitting requirements.
    - Policy S-1.2: Investigate specific groundwater levels and geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture, liquefaction, or other geologic hazards are suspected.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies.

3.6.3 Thresholds of Significance

As defined in Appendix G of the *California Environmental Quality Act* (*CEQA) Guideline*s, project impacts to geological resources are considered significant if the project would:

- Threshold #1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault;
- Threshold #2: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking;
- Threshold #3: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction;
- Threshold #4: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides;
- Threshold #5: Result in substantial soil erosion or the loss of topsoil;
- Threshold #6: 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;
- Threshold #7: 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;
- Threshold #8: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

As noted above, it was determined that there would be no impact associated with the ability of soils to support the use of septic or alternative wastewater systems. Section 5.5, Environmental Effects Found

Not to Be Significant – Geology and Soils, provides additional information on these topics. The Initial Study is included in Appendix B.1.

3.6.4 Project Impact Analysis

This section provides a project-level impact analysis for the eight thresholds related to geology and soils. The proposed project would be graded to create building pads for future multi-family residential and commercial uses, and associated infrastructure. Grading for the project would consist of approximately 4,030 cubic yards (cy) of cut material and 12,270 cy of fill material requiring an import of approximately 8,240 cy of material. No blasting or rock crushing is proposed.

The import and export of earth material is guided by Section 17.32.080 of the City's Municipal Code and prior to any import of soils, a haul route would be submitted for review and approval by the City Engineer. Additionally, grading and other earth moving activities are restricted to the hours of 7:00 AM and 4:30 PM, Monday through Friday, per Section 17.32.180 of the City's Municipal Code.

Threshold #1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The project site is located within a seismically active region, as is all of southern California; however, the project site not located on or adjacent to any known active faults. According to the California Earthquake Hazard Zone Application, the City of San Marcos is not identified as a jurisdiction affected by Alquist-Priolo Earthquake Fault Zones (California Department of Conservation 2023). Therefore, the site is not located within a currently established Alquist-Priolo Earthquake Fault Zone. The nearest known active-fault zone is the Newport-Inglewood – Rose Canyon Fault Zone, located approximately 11.5 miles west of the subject site. The risk associated with ground rupture hazard is very low (AGS 2022).

Project structures would be designed in accordance with the California Building Code (CBC) (2022 or most current version at time of building) for resistance to seismic shaking. The project would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of the State of California Occupational Safety and Health Administration (Cal/OSHA).

Additionally, the project would implement all recommendations from the preliminary geotechnical investigation (AGS 2022). These recommendations include general provisions related to the site as well as specific recommendations related to foundation design, concrete design, and corrosion. The detailed recommendations are included in Chapter 6 of the geotechnical report, which is included as Appendix F of this document.

With adherence to all regulations and recommendations, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. Impacts would be **less than significant**.

Threshold #2: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project site is located in tectonically-active southern California. The type and magnitude of seismic hazards affecting the site are dependent on the distance to causative faults, the intensity, and the

magnitude of the seismic event. Per the geotechnical study (AGS 2022), the site is not located within a currently established Alquist-Priolo Earthquake Fault Zone. The nearest known active-fault zone is the Newport-Inglewood – Rose Canyon Fault Zone, located approximately 11.5 miles west of the subject site. The risk associated with ground rupture hazard is low.

As described in Threshold #1, the project would be designed in accordance with the latest CBC, current design specification of the Structural Engineers Association of California, other applicable regulations, all applicable requirements of the State of California Occupational Safety and Health Administration (Cal/OSHA), and recommendations from the preliminary geotechnical investigation (AGS 2022). With adherence to all regulations and recommendations, impacts related seismic ground shaking would be **less than significant.**

Threshold #3: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Seismic-related Ground Failure

The geotechnical study (AGS 2022) indicated that there are no active faults mapped on the project site and the site is not located within a mapped Alquist-Priolo Earthquake Fault Zone. Accordingly, the potential for fault surface rupture on the project site is very low (AGS 2022).

Liquefaction

Liquefaction occurs when loose, saturated, generally fine sands and silts are subjected to strong ground shaking. The soils lose shear strength and become liquid; potentially resulting in large total and differential ground surface settlements as well as possible lateral spreading during an earthquake. Seismically induced settlement can occur in response to liquefaction of saturated loose granular soils, as well as the reorientation of soil particles during strong shaking of loose, unsaturated sands.

The project site is identified as having Zero to Low Susceptibility for liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (San Marcos 2012). Per the geotechnical study, dependent upon the thickness of undocumented fill and the existing water table, the project site has potential for liquefaction. The underlying sedimentary rock is not considered susceptible to liquefaction. Upon conclusion of remedial grading, the site would not be considered susceptible to liquefaction (AGS 2022). Therefore, the project would not result in seismic-related ground failure, including liquefaction. Impacts would be **less than significant**.

Threshold #4: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project site is somewhat level, separated into an upper and lower pad, with a 5- to 6-foot-high gentle slope running north-south that separate the two pads. Elevations range from approximately 580 feet near the southwest corner to 600 feet near the northeast corner. There are no significant slopes located adjacent to the project site and the shallow slope along the west edge of the property is not expected to be prone to seismically induced landsliding. Further, the project site is identified as having Zero to Low Susceptibility for soil slip, surficial landslides, or debris flow per Figure 6-1 of the Safety Element of the City's General Plan (City of San Marcos 2012).

According to the geotechnical study, given the relatively flat gradients across the site and the surrounding area, landsliding, mass wasting, and/or surficial instability onsite is considered to be

remote. Additionally, significant slopes are not located adjacent to the site. The shallow slope along the west side of the property line is not expected to be prone to seismically induced landsliding. Seismically induced landsliding is not considered to be a hazard at the site (AGS 2022). Therefore, the project would not directly or indirectly cause potentially substantial adverse effects, including the risk of loss, injury or death involving landslides. Impacts would be **less than significant.**

Threshold #5: Result in substantial soil erosion or the loss of topsoil?

Proposed site improvements require grading and soil import of approximately 8,240 cy of material. The project would be under the State Water Resources Control Board (SWRCB) General Construction Permit, which prohibits sediment or pollutant release from the project site and requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of best management practices (BMPs) that would incorporate erosion and sediment control measures during and after grading operations to stabilize these areas. Therefore, the proposed project would incorporate BMPs and recommendations that would minimize erosion and loss of topsoil. The proposed project would not result in substantial soil erosion or the loss of topsoil. Impacts would be **less than significant.**

Threshold #6: 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 geotechnical study prepared by AGS (2022), the surficial soil types consist of artificial fill/undocumented fill and topsoil/alluvium overlain atop of Middle Eocene age sedimentary rock assigned to the Santiago Formation. The fill materials were generally observed to be dry to slightly moist and loose with abundant roots. The topsoil materials consist of brown to dark brown clayey sands and sandy clays in a dry to moist and loose/soft to medium dense / firm condition. The Santiago formation consisted of soft to moderately hard interbedded silty sandstone, clayey sandstone, and sandy claystone. The unit was observed to be soft and highly weathered in the upper two feet and slightly less weathered below. The artificial fill deposits, topsoil/alluvium, and upper highly weathered portion of Santiago Formation are expected to be compressible and collapse-prone and would be removed and replaced with compacted fill (AGS 2022).

According to the geotechnical study, due to the presence of the dense underlying Santiago Formation the potential for subsidence/settlement and ground fissuring is unlikely. The potential of dynamic settlement at the subject site is anticipated to be “very low” due to the presence of the shallow sedimentary rock. Additionally, since the potential for liquefaction is very low, the potential for lateral spreading is also very low (AGS 2022).

The project site is somewhat level with elevations ranging from 580 to 600 feet. There are no significant slopes nearby and the shallow slope along the west edge of the property is not expected to be prone to seismically induced landsliding. Further, the project site is identified as having Zero to Low Susceptibility for soil slip, surficial landslides, or debris flow per Figure 6-1 of the Safety Element of the City’s General Plan (City of San Marcos 2012).

Site preparation and fill material replacement would be completed consistent with the recommendations in the geotechnical investigation (AGS 2022). Grading would be accomplished under the observation and testing of the project geotechnical engineer and engineering geologist or their authorized representative in accordance with the recommendations and earthwork specifications of the geotechnical investigation and the current grading ordinance of the City of San Marcos.

In summary, the proposed project would incorporate techniques and recommendations that would minimize the potential for unstable conditions that could result in on- or off-site, landslide, lateral spread, subsidence, liquefaction, or collapse. Impacts would be **less than significant**.

Threshold #7: 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?

According to the geotechnical investigation prepared by AGS (2022), the expansion potential of the encountered soils is expected to be very low to medium when classified in accordance with ASTM D-4829. It is possible that some materials with a "high" expansion potential may be encountered. However, the expansion potential of these materials is not considered to pose a hazard for the proposed project. With adherence to the geotechnical report recommendations, which include removal and compaction during grading, impacts related to expansive soils would be **less than significant**.

Threshold #8: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The proposed project site lies within the Peninsular Ranges Geomorphic Province of southern California. According to the Preliminary Geotechnical Evaluation prepared for the project (AGS 2022), the geologic conditions underlying the site consist of undocumented artificial soils, and topsoil/alluvium. Middle Eocene age sedimentary rock assigned to the Santiago Formation was observed to underlie the project site below the fill and topsoil material. The site is geologically mapped as sitting near the boundary of the Santiago Formation and undifferentiated metasedimentary and metavolcanic rock although metasedimentary / metavolcanic rock was not encountered during the geological study (AGS 2022). The site is also mapped as including Young Alluvial Flood Plain deposits from the Holocene and late Pleistocene. The Eocene epoch is part of the Tertiary Period in the Cenozoic Era, and lasted from about 56 to 34 million years ago. The Quaternary Period is divided into two epochs: the Pleistocene (2.588 million years ago to 11.7 thousand years ago) and the Holocene (11.7 thousand years ago to today).

According to the San Diego County Guidelines for Determining Significance of Paleontological Resources, sedimentary rock units in the Peninsular Ranges Region may have the potential to contain paleontological resources (County of San Diego 2009). Therefore, there is a potential that the site could contain paleontological resources that could be disturbed during grading activities for the project. This represents a potentially **significant impact** (**Impact GEO-1**) and mitigation is required.

- **Impact GEO-1**: Project grading may result in disturbance of previously unknown paleontological resources.

3.6.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to geology and soils, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts on related to

geology and soils. All of the cumulative projects identified in Table 2-3 are considered in this cumulative analysis.

Due to the localized nature of geology and soils, cumulative projects would address potential impacts to geology and soils on a project-by-project basis, as potential geologic hazards and soil composition varies by site. Each cumulative project would be required to assess individual and site-specific geologic conditions, which would inform construction and development of each site. All cumulative development would be subject to similar requirements to those imposed and implemented for the proposed project and would be required to adhere to applicable regulations, standards, and procedures.

Further, as discussed in Section 3.6.4, the project site has the potential to yield paleontological resources. Thus, impacts to paleontological resources from implementation of the project would be potentially significant prior to mitigation. Some of the projects on the cumulative list are located in areas that support sedimentary rock units of the Santiago Formation. Certain types of sedimentary rock units have the potential to contain paleontological resources. Similar to the project, the presence of these resources is typically unknown until earthwork activities commence for project construction. It is expected that cultural resources studies would be prepared for all cumulative projects to assess potential impacts. For the cumulative projects that are within sensitive areas for paleontological resources, the expectation is that mitigation measures would be included to require consultation with a paleontologist or a construction monitor to ensure that impacts to this resource to do not occur. As such, the proposed project would not result in significant cumulative impacts for geology and soils. Impacts would be **less than significant.**

3.6.6 Mitigation Measures

Due to the fact that the sedimentary rock units of the Santiago Formation may contain paleontological resources, there is a potential that the site could contain paleontological resources that could be disturbed during grading activities for the project. The following mitigation is required.

MM-GEO-1 Prior to project grading the project applicant shall retain a qualified paleontologist to review the proposed project area to determine the potential for paleontological resources to be encountered. If there is a potential for paleontological resources to occur, the paleontologist shall identify the area(s) where these resources are expected to be present, and a qualified paleontological monitor shall be retained to monitor the initial cut in any areas that have the potential to contain paleontological resources.

3.6.7 Conclusion

Based upon the analysis presented in Sections 3.6.3 and 3.6.4, impacts associated with seismicity, liquefaction, landslides, erosion/loss of topsoil, compressible soils, and expansive soils, were determined to be less than significant. The project would adhere to all recommendations in the preliminary geotechnical investigation prepared for the project (AGS 2022). Due to the fact that sedimentary rock units of the Santiago Formation have the potential to contain paleontological resources, there is a potential that the site could contain paleontological resources that could be disturbed during grading activities for the project. Incorporation of mitigation measure MM-GEO-1 would require a paleontologist to identify areas where paleontological resources may be present and to monitor the initial cut in any areas that may have the potential to contain paleontological resources. This would reduce the potential for impact to paleontological resources to below a level of significance.

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3.7 Greenhouse Gas Emissions

Introduction

This section analyzes the potential for the proposed project to have impacts related to greenhouse gas (GHG) emissions. This section analyzes short-term construction impacts and long-term operational impacts and determines whether the proposed project would conform to the City of San Marcos Climate Action Plan (CAP). This section is based upon the following report, which is included as **Appendix H** of the Environmental Impact report (EIR)[7]:

Greenhouse Gas Assessment, Capalina Apartments Residential Development, prepared by LDN Consulting, June 19, 2023 (LDN 2023c)

The project's Climate Action Plan Consistency Review Checklist (CAP Checklist) is included as **Appendix I**. A discussion of the project's consistency with the requirements of the CAP Checklist is provided later in this section. The CAP is available on the City's web site.[8]

Table 3.7-1 summarizes the project- and cumulative-level GHG impacts, by threshold.

Table 3.7-1. Greenhouse Gas Emissions Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1 - Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.7.1 Existing Conditions

Global Climate Change

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (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.

The greenhouse effect is the trapping and build-up of heat in the atmosphere near the Earth's surface. This natural process contributes to regulating the Earth's temperature and creates a pleasant, livable

7 Full references for documents cited in this section are included in Chapter 7, References, of this EIR.
8 http://www.san-marcos.net/departments/development-services/planning/climate-action-plan

environment on the Earth. Human activities that emit additional GHGs into the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect, and causing the Earth's surface temperature to rise.

GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere and contribute to the greenhouse effect. 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. To simplify greenhouse gas calculations, both CH_4 and N_2O are converted to an equivalent amount of carbon dioxide, or CO_2e. CO_2e is calculated by multiplying the calculated levels of CH_4 and N_2O by a Global Warming Potential (GWP). GWPs for both CH_4 and N_2 are presented within the 2007 Intergovernmental Panel on Climate Change (IPCC) report as being 25 and 298, respectively (IPCC 2007)[9].

A brief description of each GHG follows (LDN 2023c):

Carbon Dioxide. CO_2 is widely reported as the most important anthropogenic greenhouse gas because it currently accounts for the greatest portion of the warming associated with human activities. Carbon dioxide occurs naturally as part of the global carbon cycle, but human activities have increased atmospheric loadings through combustion of fossil fuels and other emissions sources. Natural sinks that remove carbon dioxide from the atmosphere (e.g., oceans, plants) help regulate carbon dioxide concentrations, but human activities can disturb these processes (e.g., deforestation) or enhance them

Methane. CH_4 comes from many sources, including human activities such as coal mining, natural gas production and distribution, waste decomposition in landfills, and digestive processes in livestock and agriculture. Natural sources of methane include wetlands and termite mounds.

Nitrous Oxide. N_2O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.

3.7.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to GHGs, including federal, state, and local guidelines.

Federal

The United States Environmental Protection Agency (USEPA) is the federal agency responsible for implementing the federal Clean Air Act (CAA). The Supreme Court of the United States ruled on April 2, 2007, that CO_2 is an air pollutant as defined under the CAA, and that USEPA has the authority to regulate emissions of GHGs.

[9] The IPCC 2007 report was updated in 2021 and now recommends adding a 100 year timeline to the GWP discussions (GWP-100). For CH_4 the GWP is between 27-30 and the GWP for N_2O is 273 (US EPA, 2023). Since CalEEMod is the adopted computer model for calculating GHGs, the earlier GWPs within CalEEMod were utilized.

Proposed Endangerment and Cause or Contribute Findings for GHG under the CAA

On December 7, 2009, USEPA signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations; and
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare. These findings do not themselves impose any requirements on industry or other entities; however, this action is a prerequisite to finalizing USEPA's proposed GHG emission standards for light-duty vehicles, which USEPA proposed in a joint proposal including the Department of Transportation's (DOT) proposed CAFE standards on September 15, 2009.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, mobile sources, renewable energy procurement, water, solid waste, and water.

State Climate Change Targets

Executive Order S-3-05. Executive Order (EO) S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill 32. In furtherance of the goals established in EO S-3-05, the legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions to 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

Executive Order B-55-18 to Achieve Carbon Neutrality (September 2018) establishes a statewide policy for the state to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

California Air Resources Board's Climate Change Scoping Plan. Under AB 32, the California Air Resources Board (CARB) is responsible for and is recognized as having the expertise to carry out and develop the programs and regulations necessary to achieve the GHG emissions reduction mandate of AB 32. Therefore, in furtherance of AB 32, CARB adopted regulations requiring the reporting and verification of GHG emissions from specified sources, such as industrial facilities, fuel suppliers and electricity importers (see Health & Safety Code Section 35830; Cal. Code Regs., tit. 17, §§95100 et seq.). CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons (MMT) CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (2008 Scoping Plan) in accordance with Health and Safety Code Section 38561. The 2008 Scoping Plan established an overall framework for the measures to be implemented to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The 2008 Scoping Plan evaluated opportunities for sector-specific reductions, integrated all CARB and Climate Action Team[10] early actions and additional GHG reduction features by both entities, identified additional measures to be pursued as regulations, and outlined the role of a cap-and-trade program.

In the 2008 Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level, i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "Business-As-Usual" [BAU]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the 2008 Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12% to 20%), CARB determined

10 The Climate Action Team is comprised of state agency secretaries and heads of state agencies, boards, and departments; these members work to coordinate statewide efforts to implement GHG emissions reduction programs and adaptation programs.

that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework (First Update)* defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update found that California was on track to meet the 2020 emissions reduction mandate established by AB 32, noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In November 2017, CARB released *California's 2017 Climate Change Scoping Plan* for public review and comment. This update includes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The strategy includes continuing the Cap-and-Trade Program through 2030,[11] inclusive policies and broad support for clean technologies, enhanced industrial efficiency and competitiveness, prioritization of transportation sustainability, continued leadership on clean energy, putting waste resources to beneficial use, supporting resilient agricultural and rural economics and natural and working lands, securing California's water supplies, and cleaning the air and public health. When discussing project-level GHG emissions reduction actions and thresholds, the *2017 Scoping Plan* states "[a]chieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." However, the *2017 Scoping Plan* also recognizes that such an achievement "may not be feasible or appropriate for every project … and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." CARB's Governing Board adopted the *2017 Scoping Plan* in December 2017.

The 2022 Climate Change Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic greenhouse gas emissions by 85% below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon. The plan calls for a need to take an unprecedented transformation and aggressively seek reductions to reduce the need of fossil fuels by moving to zero emission transportation, electrifying the cars, buses, trucks, and trains. The plan relays on external controls and requires partnership and collaboration with the federal government, other U.S. states, and other jurisdictions around the world for California to succeed in achieving its climate targets.

Executive Order B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's *Scoping Plan* to express the 2030 target in terms of MMT CO_2e. The EO also calls for state agencies to continue to develop and implement GHG emission reduction

[11] In July 2017, AB 398 was enacted into law, thereby extending the legislatively authorized lifetime of the Cap-and-Trade Program to December 31, 2030.

programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016.

Senate Bill 32 and Assembly Bill 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction target; make changes to CARB's membership and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants (TACs) from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

Assembly Bill 1279, California Climate Crisis Act (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 greenhouse gas emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85% compared to 1990 levels and directs CARB to work with relevant state agencies to achieve these goals.

Senate Bill 1020, 100% Clean Electric Grid (September 2022) creates clean electricity targets of 90% by 2035 and 95% by 2040 with the intent of advancing the state's trajectory to the existing 100% clean electricity retail sales by 2045 goal.

California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new buildings and alterations or additions to existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards were approved and adopted by the California Building Standards Commission in December 2018. The 2019 standards became effective January 1, 2020. The standards required that all low-rise residential buildings shall have a photovoltaic system meeting the minimum qualification requirements such that annual electrical output is equal to or greater than the dwelling's annual electrical usage. Notably, net energy metering rules limit residential rooftop solar generation to produce no more electricity than the home is expected to consume on an annual basis. Single-family homes built with the 2019 standards will use about 7% less energy due to energy efficiency measures versus those built under the 2016 standards, while new nonresidential buildings will use about 30% less energy mainly to lighting upgrades (CEC 2018).

The 2022 Building Energy Efficiency Standards (Energy Code) improve upon the 2019 Energy Code for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective on January 1, 2017. The mandatory standards require mandatory reduction in indoor and outdoor water use, diversion of construction and demolition waste, mandatory inspections of energy systems, inclusion of electric vehicle charging stations or designated parking spaces capable of supporting future charging stations, and use of low-pollutant-emitting exterior and interior finish materials.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The newest CALGreen Standards were updated in 2022 and became effective on January 1, 2023. The updated Code includes modifications to current codes and project buildings will need to comply with the most recently adopted standards. Mandatory requirements include many updated Electric Vehicle Charging requirements for multi and single family developments (California Title 24, Part 11, 2022).

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Mobile Sources

State Vehicle Standards. AB 1493 requires CARB to set GHG emission standards for passenger vehicles and EO S-1-07 sets a declining Low Carbon Fuel Standard to reduce the carbon intensity of California passenger vehicle fuels. The Advanced Clean Cars Program is an emissions control program to reduce smog-forming pollution, GHG emissions, promote clean cars, and provide fuels for clean cars. EO B-16-12 supports and facilitates development and distribution of Zero Emissions Vehicles.

Senate Bill 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land; (2) supersede the land use authority of cities and counties; or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the original SB 375 targets for the regional metropolitan planning organizations. The targets adopted for SANDAG in 2010 were a 7% reduction in per capita passenger vehicle GHG emissions by 2020 and a 13% reduction by 2035, measured relative to 2005 GHG emissions. In 2018, CARB adopted the second round of SB 375 reduction targets, and increased SANDAG's 2020 target to a 15% reduction in per capita passenger vehicle GHG emissions and the 2035 target to a 19% reduction, using the same 2005 baseline (CARB 2021).

In December 2021, SANDAG adopted its 2021 Regional Plan, which contains the region's current SCS (Appendix D of the Regional Plan). The SANDAG's GHG emissions quantification analysis determined that the San Diego region reduced per capita CO_2 emissions by 17.9% in 2020 compared to 2005 baseline, which exceeds the 2020 target set for SANDAG of 15% reduction. It was noted that measurement data was significantly impacted by COVID-19 due to intermittent stay-home orders, changes in employment, employee work location, telework, tourism travel, package and food delivery, cross-border travel restrictions, declines in public transit ridership, and price of gasoline, among many other impacts. SANDAG estimated that implementation of the SCS would result in a 20% CO_2 emissions reduction for cars and light-duty trucks by 2035. The GHG reductions for the 2021 Regional Plan were calculated using the CARB model EMFAC 2014 and adjustment factors provided by CARB to account for differences in emissions rates between EMFAC 2007 (used to set the original targets in 2010) and EMFAC 2014 (SANDAG 2021).

The 2021 Regional Plan provides a big picture vision for how the San Diego region will grow through 2050 and beyond with an implementation program to help make the plan a reality. Within the Regional Plan, SANDAG introduced a transformative vision for transportation in San Diego County that completely reimagines how people and goods could move throughout the region in the 21st century.

The plan outlines the "5 Big Moves" which are: Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and the Next OS. The SANDAG Board of Directors will be asked to adopt the 2021 Regional Plan in late 2021. Once adopted, it will become the region's long-term plan to be implemented incrementally through the Regional Transportation Improvement Program (RTIP).

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025 that combined standards for smog producing pollutants and greenhouse gases into one program. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB also has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. To reduce GHG emissions, CARB, in conjunction with the USEPA and the NHTSA, also adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025.

Advanced Clean Cars II Program (2022). CARB's latest rule is known as Advanced Clean Cars II which continues the concept of increasing stringency for fuel-efficiency standards and increasing the number of zero emission vehicles (ZEVs) in the vehicle fleet starting with model year 2026 until model year 2035 when all new vehicles sold in the state must be ZEVs. The Board approved the proposed ACC II regulations in August 2022. The Final Statement of Reasons will be released and the proposed regulation will go to the Office of Administrative Law to become final.

EO N-79-20, Zero Emission by 2035, calls for elimination of new internal combustion passenger vehicles by 2035. By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they already own. The primary mechanism for achieving the Zero Emission Vehicle (ZEV) target for passenger cars and light trucks is the Advanced Clean Cars (ACC) II Program.

As part of the Executive Order, the Governors Office of Business and Economic Development (GO-Biz) was tasked with preparing a Zero-Emission Vehicle Market Development Strategy along with the accompanying California State agency ZEV Action Plans.

In addition to ACC II, the Clean Miles Standard regulation will also help enable the goal of 100% ZEV sales in 2035 by creating demand for ZEVs. This regulation will have aggressive requirements for electric miles that will transition ride-hailing fleets to zero-emission operations starting in 2023 and ramping up through 2030. This regulation was approved by the CARB Board in 2021.

Senate Bill 350. In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see California Public Utilities Code, Section 740.12).

Renewable Energy Procurement

SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030 be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

SB 100 (2018) has further accelerated and expanded the RPS, requiring achievement of a 50% RPS by December 31, 2026 and a 60% RPS by December 31, 2030. SB 100 also established a new statewide policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100% of electricity retail sales within the State of California by December 31, 2045.

Water

EO B-29-15 In response to drought-related concerns, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Statewide Emergency Water Conservation Regulations (2022). On January 4, 2022, the California State Water Board adopted its first emergency regulation of 2022 that prohibits certain wasteful water use practices statewide, including turning off decorative water fountains, pausing irrigation system when it's raining and for two days after rain, use an automatic shutoff nozzle on water hoses, don't use water to clean sidewalks and driveways and avoid overwatering of trees. This regulation was readopted in December 2022.

On May 24, 2022, the State Water Board adopted a second statewide emergency water conservation regulation that bans using potable (drinkable) water on decorative or non-functional grass at commercial, industrial, and institutional properties – including areas of nonfunctional turf under homeowners' association control. It went into effect on June 10, 2022. It also requires urban water suppliers to implement all demand-reduction actions under Level 2 of their Water Shortage Contingency Plans (unless otherwise allowed). It will remain in effect for one year from the effective date, unless the Board modifies it, readopts it, or ends it before then.

Solid Waste

AB 939, Integrated Waste Management Act (1989) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. The Act was adopted to reduce the volume and toxicity of solid waste that is landfilled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties to divert a minimum of 25% of the solid waste sent to landfills by 1995, and 50% by the year 2000 through source reduction, recycling and composting, and environmentally safe landfill disposal and transformation. This law established the California Integrated Waste Management Board, later the California Department of Resources Recycling and Recovery (CalRecycle).

AB 1327, California Solid Waste Reuse and Recycling Act (1991) required adequate areas for collecting and loading recyclable materials within a project site.

SB 1016, Solid Waste Disposal Measurement Act (2008) introduced a new diversion measurement system, which was based on a City's population and disposal tons to calculate a per capita disposal rate expressed in pounds per person per day. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of the City's recycling performance. Under this measurement system, a city needs to annually dispose of an amount equal to or less than its "50 percent equivalent per capita disposal target" calculated by CalRecycle.

AB 341, Mandatory Commercial Recycling (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. This law requires California commercial or public entities that generate four or more cubic yards of solid waste per week, and multifamily dwellings of five or more units, to arrange for recycling services.

AB 1826, Mandatory Commercial Organics Recycling (2014) requires local governments to establish organic waste recycling programs. In addition, it requires businesses and multifamily residences of at least five units that generate four cubic yards or more of solid waste per week to arrange for organic waste recycling services.

Senate Bill 1383, Short-Lived Climate Pollutants: Organic (2016) is a statewide effort to reduce emissions of short-lived climate pollutants (SLCP). Specifically, the law sets the following targets: 1) Reduce statewide disposal of organic waste by 50% by January 1, 2020 and by 75% by January 1, 2025 (based on 2014 levels), and 2) rescue at least 20% of currently disposed of edible food for human consumption by 2025.

Increasing the amount of solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products. Increased diversion of organic materials (green and food waste) will also reduce GHG emissions (CO_2 and CH_4) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

Local

City of San Marcos Climate Action Plan

Consistent with AB 32, the City adopted a CAP in September 2013 as a long-range plan to reduce GHG emissions and mitigate climate change impacts associated with City government operations and with implementation of the City's General Plan. An updated CAP was adopted on December 8, 2020.

The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. The CAP is a plan for the reduction of GHG emissions in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP (City of San Marcos 2020).

The CAP set the following citywide targets:

- 4% below 2012 levels (575,000 MT CO_2e) by 2020.
- 42% below 2012 levels (347,000 MT CO_2e) by 2030.

The City has also developed a Climate Action Plan Consistency Review Checklist (CAP Checklist), in conjunction with the CAP, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The CAP Consistency Guidance Memo dated July 15, 2020 summarizes the methodology and application of a GHG screening threshold which is set at 500 metric tons of carbon dioxide equivalent [MT CO_2e] per year as outlined in the CAP. Projects that are projected to emit fewer than 500 MT CO_2e annually would not make a considerable contribution to the cumulative impact of climate change and would not need to provide additional analysis to demonstrate consistency with the CAP. This screening threshold is for new development projects consistent with the City's General Plan. When such a project exceeds the screening threshold, the project would be required to demonstrate consistency with the CAP through the CAP Checklist.

In most cases, compliance with the CAP Checklist would provide the CEQA streamlining path to allow project specific environmental documents, if eligible, to tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts. Projects that are consistent with the General Plan and implement CAP Checklist GHG reduction measures may incorporate by reference the CAP's cumulative GHG analysis. The City's CAP meets the requirements under Section 15183.5 of the CEQA Guidelines as a qualified plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects.

If a project is consistent with the existing General Plan land use designation(s), it can be determined to be consistent with the CAP projections and can move forward to Step 2 of the CAP Checklist.

For projects seeking a General Plan Amendment, such as the proposed project, the CAP Checklist requires a comparative analysis to determine if the General Plan Amendment results in an equivalent or less GHG-intensive project when compared to the existing designations. In addition to providing evidence to support the conclusion that the project would generate fewer emissions than existing designations, these projects would demonstrate consistency with the CAP through completion of Step 2 of the CAP Checklist.

If a General Plan Amendment results in a more GHG-intensive project, the project is required to prepare a quantitative GHG analysis based on applicable sections of the CEQA Guidelines.

City of San Marcos General Plan

Land Use and Community Design Element

- Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.
    - Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.
    - Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.
    - Policy LU-2.7: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.

Conservation and Open Space Element

The Conservation and Open Space Element of the City of San Marcos General Plan identifies one goal and two policies regarding GHGs that are applicable to the proposed project:

- Goal COS-4: Improve regional air quality and reduce GHG emissions that contribute to climate change.
    - Policy COS-4.3: Participate in regional efforts to reduce GHG emissions.
    - Policy COS-4.4: Quantify community-wide and municipal GHG emissions, set a reduction goal, identify and implement measures to reduce GHG emissions as required by governing legislation.
    - Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.
    - Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.

Mobility Element

Additionally, the Mobility Element of the City of San Marcos General Plan identifies one goal and associated policy that addresses GHG emission reductions through minimized vehicle miles traveled and reduced fuel consumption:

- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.
    - Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and GHG emissions; and reinforces the role of the street as a public space that unites the City.

Environmental Justice Element

The following goal and policies in the City of San Marcos General Plan, Environmental Justice Element are applicable to greenhouse gas emissions:

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
    - Policy EJ-.1.5: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce stormwater runoff (See Policy LU-2.7).
    - Policy EJ-1.6: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City. (See Policy M-1.3)
    - Policy EJ 1-8: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City. (See Policy M-3.1)
    - Policy EJ-1.11: Participate in regional efforts to reduce greenhouse gas emissions. (See Policy COS-4.3)
    - Policy EJ-1.12: Quantify community-wide and municipal greenhouse gas (GHG) emissions, set a reduction goal, identify and implement measures to reduce greenhouse gas emissions as required by governing legislation. (See Policy COS-4.4)
    - Policy EJ-1.13: Encourage energy conservation and the use of alternative energy sources within the community. (See Policy COS-4.5)
    - EJ-1.14: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment. (See Policy COS-4.6)

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies pertaining to greenhouse gas emissions.

3.7.3 Thresholds of Significance

Appendix G of the State CEQA Guidelines identifies two evaluation criteria to determine the significance of GHG emissions. A significant impact would be identified if the project would:

- Threshold #1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Threshold #2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gases.

The City developed a CAP Checklist, in conjunction with the CAP, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA.

The CAP Consistency Guidance Memo summarizes the methodology and application of a GHG screening threshold which is set at 500 MT CO_2e per year. Projects that are projected to emit fewer than 500 MT CO_2e annually would not make a considerable contribution to the cumulative impact of climate change and would not need to provide additional analysis to demonstrate consistency with the CAP. This screening threshold is for new development projects consistent with the City's General Plan. When such a project exceeds the screening threshold, the project would be required to demonstrate consistency with the CAP through the CAP Checklist.

In most cases, compliance with the CAP Checklist would provide a streamlined CEQA review path to allow project specific environmental documents, if eligible, to tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts. Projects that are consistent with the General Plan and implement CAP GHG reduction measures may incorporate by reference the CAP's cumulative GHG analysis. The City's CAP meets the requirements under Section 15183.5 of the CEQA Guidelines as a qualified plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects.

If a project is consistent with the existing General Plan land use designation(s), it can be determined to be consistent with the CAP projections and can move forward to Step 2 of the CAP Checklist.

For projects seeking a General Plan Amendment, such as the proposed project, the CAP Checklist requires a comparative analysis to determine if the amendment results in an equivalent or less GHG-intensive project when compared to the existing designations. In addition to providing evidence to support the conclusion that the project would generate fewer emissions than existing designations, these projects would demonstrate consistency with the CAP through completion of Step 2 of the CAP Checklist.

If a land use designation amendment results in a more GHG-intensive project, the project is required to prepare a quantitative GHG analysis based on applicable sections of the CEQA Guidelines.

3.7.4 Project Impact Analysis

The GHG analysis focuses on a relative comparison between the proposed project and the MU3 General Plan Buildout scenario. GHGs related to construction and daily operations were calculated using the CalEEMod 2020.4.0 GHG model. The construction module in CalEEMod was used to calculate the emissions associated with the construction of the project. The CalEEMod input/output model is shown in Attachments A and B of the GHG report in Appendix H of this document. It should be noted that CalEEMod 2022 model has been released, though since its release, it has been updated 29 times. Utilization of the current release version 2022.1.1.13 is anticipated to result in lower GHG emissions than the 2020.4.0 model did which makes the 2020 version more conservative. Since the methodology of this analysis is to compare the relative intensities between the General Plan buildout scenario and the proposed project to determine if consistency with the CAP would indeed generate a less than significant impact, CalEEMod 2020.4.0 is sufficient (LDN 2023c).

The project would start grading some time in 2024 with residential construction to start shortly thereafter. Grading would consist of approximately 4,030 cubic yards (CY) of cut material and 12,270 CY of fill material requiring an import of approximately 8,240 CY of fill material. Emissions generated by earthwork activities associated with grading were analyzed within CalEEMod using a "Grading Equipment Passes" methodology which has been approved by the South Coast Air Quality Management District (SCAQMD). As noted in the CalEEMod documentation, this methodology was

approved by CAPCOA (CAPCOA 2021). Since CalEEMod was used for GHG emissions estimation from construction, this methodology was assumed.

Threshold #1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

The following analysis presents the anticipated emissions for the proposed project and for a development project that would be consistent with the existing General Plan designation of Mixed Use 3 (MU3).

Proposed Project

Construction Emissions

Construction-related GHG emissions include emissions from site preparation, grading, building construction, paving and architectural coating, including truck traffic, soils import activities, and worker trips. Emissions for construction of the proposed project were calculated based on emission factors from the latest CalEEMod 2020.4.0 GHG model. The project would start grading sometime in 2024 with residential construction to start shortly thereafter. Earthwork activities for the project include an import of 8,240 CY of soil. Earthwork associated with grading within CalEEMod uses a "Grading Equipment Passes" methodology which has been approved by SCAQMD and CAPCOA (LDN 2023c).

Table 3.7-2 presents the anticipated construction emissions for the proposed project. As shown in Table 3.7-2, anticipated construction related GHG emissions for the proposed project are estimated at 413.62 $MTCO_2e$ over the construction life of the project. Per guidance from SCAQMD, the construction-related emissions are amortized over a 30-year period because impacts from construction activities occur over a relatively short-term period of time and they contribute a relatively small portion of the overall lifetime project GHG emissions (SCAQMD 2008). SDAPCD does not have guidance on this topic and SCAQMD's recommended methodology has been widely accepted throughout the State. This amortized figure estimates project construction would contribute 13.78 MT per year of CO_2e.

Table 3.7-2. Expected Annual Construction CO_2e Emissions Summary (Proposed Project)

Year	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	Total CO_2e (metric tons/year)
2024	0.00	270.39	270.39	0.03	0.01	274.49
2025	0.00	137.71	137.71	0.02	0.00	139.13
Total Construction Emissions						413.62
Yearly Average Construction Emissions (Metric Tons/year over 30 years)						13.78

Source: LDN Consulting 2023c.
Note: Expected Construction emissions are based upon CalEEMod modeling assumptions for equipment and durations listed in Table 4.1 of the GHG Report (LDN 2023c).

Proposed Project Operational Emissions

Once construction is completed the proposed project would generate GHG emissions from daily operations, including sources such as area, energy, mobile, solid waste, and water uses, which are calculated within CalEEMod. Area sources include consumer products, landscaping, and architectural

coatings as part of regular maintenance. Energy sources would be from electricity and natural gas use. Mobile sources are from vehicular traffic. Solid waste generated in the form of trash is also considered as decomposition of organic material breaks down to form GHGs. Water sources include standard residential uses including landscaping activities. GHGs from water are also indirectly generated through the conveyance of the resource via pumping throughout the state and as necessary for wastewater treatment. For consistency with the CAP, the project was analyzed under the Year 2030 scenario. Also, no hearth (fireplace) options were included in the modeling. A design feature has been included in the project description to indicate exclusion of fireplaces from the project.

Electrical energy-intensity factors were updated in CalEEMod 2020.4.0 to reflect San Diego Gas and Electric's (SDG&E) latest emissions rates which SDG&E provided to CAPCOA for the model update. CalEEMod 2016.3.2 (the model prior to 2020.4.0) was based on default emissions from 2009 which included a 10.5% RPS factor as indicated by the California Public Utilities Commissions (CPUC) (CPUC 2016). The default CalEEMod 2020.4.0 emissions are now 540 pounds per megawatt hour (lbs/MWh) which when compared with the defaults in 2016.2 represents a 33% p achievement for RPS in 2020 which is consistent with SBX1-2. In accordance with SB 100, SDG&E will achieve an RPS of 60% in 2030. **Table 3.7-3** identifies what the emissions in 2030 will be assuming a 60 percent RPS is achieved as required by current law.

Table 3.7-3. SDG&E Energy Intensity Factors

GHG	2009 Factors (lbs/MWh) w/10.5% RPS	Current RPS Factors 2020 33% Achieved (lbs/MWh)	Current RPS Factors 2030 60% Achieved (lbs/MWh)
Carbon Dioxide (CO_2)	720.49	539.98	322.38
Methane (CH_4)	0.029	0.033	0.0197
Nitrous Oxide (N_2O)	0.006	0.004	0.0024

Source: LDN 2023c.

The project traffic engineer estimated that the project would generate 874 daily trips (CRA2023). These traffic numbers were utilized within the CalEEMod analysis. Additionally, it was assumed that an average of 10% of the structural surface area would be re-painted each year.

Since the proposed project seeks a General Plan amendment, the proposed project's analysis is based on a comparison between estimated emissions from the proposed use(s) and what would otherwise be approved under the existing General Plan. If a project's proposed amendment to the General Plan would result in consistent or lower GHG emissions than development under the General Plan, the project would be required to implement the applicable CAP measures identified in Step 2 of the CAP Checklist. **Table 3.7-4** describes the CAP measures that are applicable to a multi-family residential project and how the proposed project would l comply.

Table 3.7-4. Project Consistency with Applicable CAP Checklist Measures

CAP Consistency Checklist Measures	Project Compliance
Electric Vehicle Charging Stations (Measure T-2) Will the project install electric vehicle charging stations (Level 2 or better) in at least five	The project proposes a total of 147 on-site parking spaces and 8 of those will provide Level 2 electric vehicle charging stations. The project also includes 15 EV capable spaces and 36 EV ready spaces.

CAP Consistency Checklist Measures	Project Compliance
percent of the total parking space provided on-site?	The project has been designed to meet the requirements of Measure T-2.
Transportation Demand Management (Measure T-9) Will the project develop and implement a TDM plan that includes, at minimum, all of the TDM strategies listed below? • Provide discounted monthly transit pass or provide at least 25 percent transit fare subsidy to residents/employees. • Provide designated car-share, carpool, vanpool, and/or park-and-ride parking spaces. • Provide pedestrian connections between all internal uses and to all existing or planned external streets around the project site(s). • Provide secure bicycle parking spaces or bicycle racks, showers, and clothes lockers. • Encourage telecommuting for employees (allow one telecommute day per week or compressed work weeks) or provide a telecommute work center with common office space and equipment available to residents.	**Transit Discount:** The property manager will provide transit information to the owners and make a good faith effort in offering discounted transit fares. The property management company will provide a newsletter to inform the residents there are options for reduced transit passes. **Designated Parking**: The project will provide designated car-share, carpool, vanpool, EV and/or park-and-ride spaces on site. **Pedestrian Connections:** The project proposes sidewalks along the project frontage along Capalina Road. Sidewalks are also proposed surrounding the main building and recreational area providing direct access to the dwelling units, fitness center, leasing office, and retail land use component of the proposed project. Lastly, sidewalks are proposed along the south and west side of the buildings on the north side of the property connecting directly to existing sidewalk facilities along West Mission Road. **Bicycle Spaces:** The project will provide bicycle racks and residents will have access to showers and secure bicycle storage within each of their residences. Additionally, adjacent to the fitness center, as part of the onsite restrooms, a shower and two sets of bike racks will be provided on site. **Telecommuting**: The project will have space available in the community room for residents to telecommute. Each residence will also have a suitable area for telecommuting. Additionally, the project will have common office space as part of the commercial portion that will promote telecommuting. The project has been designed to meet the requirements of Measure T-9.
Water Heaters (Measure E-1) Will the project install one of, or a combination of, the following water heater types in place of natural gas heaters?	The project will install electric tank water heaters within all units. Natural gas water heaters will not be used. The project has been designed to meet Measure E-1.
Photovoltaic Installation (Measure E-2) Will the project install photovoltaic systems with a minimum capacity of two watts per square foot of gross floor area?	The project will install photovoltaic systems with a capacity of two watts per square feet of gross floor area. The project has been designed to meet Measure E-2.

CAP Consistency Checklist Measures	Project Compliance
Landscaping Water Use (Measure W-1) Will the project comply with the City's Water Efficient Landscape Ordinance?	The project will comply with the City's Water Efficient Landscape Ordinance. The project has been designed to meet Measure W-1.
Urban Tree Canopy (Measure C-2) For multi-family residential, if the project is providing more than 10 parking spaces, will the project plant at least one tree per five parking spaces provided?	The project proposes 147 parking spaces, which would require 29 trees to meet the requirements of Measure C-2. Per the landscape concept plan, the project will plant 82trees. The project exceeds the requirements of Measure C-2.

Table 3.7-5 presents the proposed project's operational emissions summary. As shown in Table 3.7-5, the project would generate 614.79 MT CO_2e per year incorporating any CAP measures. When amortized construction emissions are added in, the project would generate 628.57 MT CO_2e. Including the GHG reduction associated with CAP Measure T-2, the provision of eight Level 2 electric vehicle charging stations, the project would generate 615.37 MT CO_2e per year. The project would be required to implement all CAP measures and these measures would further reduce GHG emissions. However, since the intent of this analysis is to compare the proposed project with the MU3 General Plan Buildout scenario, not all CAP measures were calculated as a GHG reduction.

Table 3.7-5. Proposed Project Operational Emissions Summary (MT/Year)

Source	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e (MT/Yr)
Area	0.00	1.45	1.45	0.00	0.00	1.48
Energy	0.00	123.66	123.66	0.01	0.00	124.20
Mobile	0.00	417.96	417.96	0.03	0.02	424.87
Waste	11.96	0.00	11.96	0.71	0.00	29.64
Water	2.55	23.56	26.12	0.26	0.01	34.60
					Operations Total	**614.79**
					Construction Emissions (See Table 3.7-2 above)	**13.78**
					Construction and Operations	**628.57**
					CAP Measure T-2: EV Charger Reduction	**-13.2**
					Project GHG Emissions	**615.37**

Source: LDN 2023c.
Note: The data is presented in decimal format and may have rounding errors.

MU3 General Plan Buildout Emissions

The General Plan Land Use designation for the project site is Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a maximum floor area ratio (FAR) of 1.50. A constructible concept plan for the existing site was prepared for comparison purposes. The MU3 General Plan Buildout scenario includes the construction of a multi-story office building consisting of 90,000 square feet (s.f.) of office use, 10,000 s.f. of retail use and 400 parking spaces. Parking would require both a

parking garage and ground level outside for this scenario. The total area including the parking would have a total gross floor area of 158,000 s.f. and would have a FAR of 1.5.

The MU3 General Plan Buildout scenario is assumed to have a similar construction footprint as the proposed project. A similar construction model was prepared based on default settings though did include manual updates similar to the project to reflect an identical cut/fill/import scenario. The equipment list and durations are identical for the MU3 General Plan Buildout scenario as shown in Table 4.1 of the GHG report (Appendix H of this document). **Table 3.7-6** presents the construction emissions from the MU3 General Plan Buildout scenario. Note that the construction emissions are not the same as the proposed project since the building land uses and areas are different.

Table 3.7-6. MU3 General Plan Buildout Scenario - Annual Construction CO_2e Emissions Summary

Year	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT)
2024	0.00	262.39	262.39	0.03	0.01	266.20
2025	0.00	149.30	149.30	0.02	0.01	151.35
Total Construction Emissions						**417.55**
Yearly Average Construction Emissions (Metric Tons/year over 30 years)						**13.92**

Source: LDN 2023c.

Once construction is completed the MU3 General Plan Buildout scenario would generate GHG emissions from daily operations, including area, energy, mobile, solid waste, and water uses, which were calculated similar to the proposed project using CalEEMod. Applicable CAP measures considered in this analysis include Measures T-2 (Electric Vehicle Charging Stations) and Measures E-2 (Photovoltaic Installation).

Traffic projections for the MU3 General Plan Buildout scenario were not included within the project traffic study but the traffic engineer estimated that this scenario would generate 2,200 trips. This analysis uses a 5.4 mile trip distance which is consistent with the project's air quality assessment which uses methodologies looking at EMFAC total VMT divided by the total number of trips within the County of San Diego (LDN 2023c). It should be noted that the air quality assessment used a 2025 scenario and the VMT per trip may be slightly different in 2030. Since the project comparison would utilize the same year regardless, any changes in VMT per trip would be inconsequential. This trip distance was used for the illustrative comparative analysis only (LDN 2023c).

Under this scenario, different CAP Checklist measures would apply since it would be a non-residential project. The CAP measures required for the non-residential development would include:

- Electric Vehicle Charging Stations (Measure T-2) – The MU3 General Plan Buildout scenario would have 400 parking locations and would include 20 Electric Vehicle Charging Stations.
- Transportation Demand Management (Measure T-9) – The MU3 General Plan Buildout scenario would implement all of the TDM strategies identified in Measures T-9.
- Photovoltaic Installation (Measure E-2) – The MU3 General Plan Buildout scenario would install photovoltaic systems with a minimum capacity of two watts per square foot of gross floor area (200 kilowatts).

- Urban Tree Canopy (Measure C-2) – The MU3 General Plan Buildout scenario would plant at least one tree per five parking spaces provided for a minimum of 80 trees.

Table 3.7-7 presents the operational emissions summary for the MU3 General Plan Buildout scenario. As shown in Table 3.7-7, the MU3 General Plan Buildout scenario would generate 1,488.14 MT CO_2e per year without incorporating any CAP measures. This scenario would be required to implement all of the applicable CAP measures identified above and these measures would further reduce GHG emissions. When reduction for CAP Measures T-2 and E-2 are considered, the MU3 General Plan Buildout scenario would generate 1,219.26 MT CO_2e per year.

Table 3.7-7. MU3 General Plan Buildout Scenario Operational Emissions Summary (MT/Year)

Source	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT/Yr)
Area	0.00	0.01	0.01	0.00	0.00	0.01
Energy	0.00	368.17	368.17	0.02	0.00	369.67
Mobile	0.00	983.01	983.01	0.08	0.05	999.61
Waste	19.12	0.00	19.12	1.13	0.00	47.37
Water	5.31	48.53	53.84	0.55	0.01	71.48
Operations Total						**1,488.14**
Construction Emissions (See Table 3.7-6)						**13.92**
Construction and Operations						**1,502.06**
CAP Measure T-2: EV Charger Reduction						**-182**
CAP Measures E-2: Solar PV Installation						**-100.8**
MU3 General Plan Buildout Scenario Project GHG Emissions						**1,219.26**

Source: LDN 2023c.

Comparison of the Proposed Project and the MU3 General Plan Buildout Scenario

When the proposed project's GHG emissions are compared to the GHG emissions under the MU3 General Plan Buildout scenario, it is estimated that the proposed project would result in 49.5% lower GHG emissions (615.37 MT CO_2e per year compared to 1,219.26 MT CO_2e per year) compared to the MU3 General Plan Buildout scenario. This is driven largely by the reduced number of vehicle trips that would occur under the proposed project compared to buildout under the General Plan.

The project would also implement all of the CAP Checklist measures that are applicable to multi-family housing. Projects that propose a General Plan Amendment and have GHG emissions that are less than would be anticipated for a project that would be consistent with the General Plan and implement CAP GHG reduction measures may incorporate by reference the CAP's cumulative GHG analysis. The City's CAP meets the requirements under Section 15183.5 of the CEQA Guidelines as a qualified plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. The CAP Checklist provides 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. As such, the proposed project would not generate greenhouse gas

emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would be **less than significant**.

Threshold #2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHGs

As discussed under GHG Threshold #1, above, when the proposed project's GHG emissions would be approximately 49,5% lower compared to the GHG emissions under the MU3 General Plan Buildout scenario. The City's CAP and the General Plan includes goals and policies related to GHG emissions, as detailed in Section 3.7.2 of the EIR. The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies pertaining to greenhouse gas emissions.

In summary, the project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHGs and impacts would be **less than significant**.

3.7.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect.

The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. The CAP is a plan for the reduction of GHG emissions in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP (City of San Marcos 2020). As presented in Section 3.7.4, the project complies with the City's CAP. Therefore, the project's incremental contribution to a cumulative GHG emissions effect is determined not to be cumulatively considerable and impacts would be **less than significant**.

3.7.6 Mitigation Measures

Based upon the analysis presented in Sections 3.7.4 and 3.7.5, project and cumulative greenhouse gas impacts would be less than significant. Therefore, no mitigation measures are necessary.

3.7.7 Conclusion

The analysis above considered the GHG emissions of the proposed project in comparison to the emission that would be anticipated from a project that was consistent with the existing General Plan (MU3 General Plan Buildout scenario). When the proposed project's GHG emissions are compared to the GHG emissions under the MU3 General Plan Buildout scenario, the project results in 49.5% lower GHG emissions (615.37 MT CO_2e per year compared to 1,219.26 MT CO_2e per year) compared to a General Plan (MU3 General Plan Buildout scenario. This is driven largely by the reduced number of vehicle trips that would occur under the proposed project compared to buildout under the General

Plan. The project would also implement all the CAP Checklist measures that are applicable to multi-family housing. The proposed project would be consistent with the City's CAP.

In addition to the City's CAP, the General Plan includes goals and policies related to GHG emission, as detailed in Section 3.7.2. The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, Land Use and Planning, the project is consistent with the applicable goals and policies pertaining to greenhouse gas emissions.

In summary, the project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHGs and impacts would be **less than significant**.

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3.8 Hazards and Hazardous Materials

Introduction

This section analyzes the potential for the proposed project to have impacts related to hazards and hazardous materials. The following documents was used in the preparation of this section and are included in their entirety as **Appendix J** of this Environmental Impact Report (EIR):

- *Phase I Environmental Site Assessment (ESA Report), Vacant Property Northeast Side of Capalina Road*, APN 219-115-33-00, San Marcos, California. Prepared by The Phase One Group. March 28, 2022.

The Phase I Environmental Site Assessment (Phase 1 ESA) was undertaken to assess the likelihood of any recognized environmental conditions (RECs) that might be present on-site as a result of current or historical land uses or adjacent uses. The Phase 1 ESA included site reconnaissance of the project site, reconnaissance of adjoining properties, a review of the historical usage of the project site, and a review of relevant documentation provided by various public and private sources. Regulatory information was also reviewed from federal, state, and local agencies through various electronic databases listing possible hazardous waste-generating facilities on and within the vicinity of the project site.

The American Society for Testing and Materials (ASTM) Designation E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process defines a REC as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions" (ASTM 2013). De minimis conditions are those that generally do not present a threat to human health or the environment and that generally would not be the subject of enforcement action if brought to the attention of appropriate governmental agencies.

ASTM Designation E 1527-13 also defines Historical RECs. They define a 'Historical REC' (HREC) as "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)" (ASTM 2013).

Table 3.8-1 summarizes the hazards/hazardous materials and cumulative-level impact analysis, by threshold, for the proposed project.

Table 3.8-1. Hazards and Hazardous Materials Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact after Mitigation
#1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact	No Impact	No Impact
#4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#5: For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#7: Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.8.1 Existing Conditions

This section describes the existing conditions on the project site and vicinity related to hazards and hazardous materials.

Historical Land Uses

Aerial photographs, topographic maps, and previous reports of the project site were reviewed for evidence of past land uses that had the potential to have impacted the project site through the use, storage, or disposal of hazardous substances and/or petroleum products. Per the Phase I ESA, the project site appeared to be vacant pasture land from prior to 1939 until approximately 1974, when the northwestern perimeter of the project site appeared to be vacant, rough-graded land. By 1980, the project site appeared to be vacant, rough-graded land with what appeared to be an area graded for uses as a vehicle parking area on the southeastern portion of the project site. By 1996, the project site appeared to be vacant, weed-abated land. By 2005, a vehicle parking area appears to be to be located on the southeastern perimeter of the project site. By 2012, the vehicle parking area was removed and the project site appeared to be vacant, weed-abated land.

Database Review

An environmental regulatory database review of local, state, and federal regulatory databases was conducted for the project site and facilities within one mile of the project site. The databases, including the Envirosite Corporation, Federal National Priorities List, Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERLIS), Federal CERCLIS No Further Remedial Action Planned (NFRAP) List, Federal Resource Conservation and Recovery Act (RCRA) Corrective Action Sites (CORRACTS) Program, Federal RCRA Non-CORRACTS Treatment, Storage and Disposal (TSD) Facilities List, Federal RCRA Generator List, Federal Institutional Controls/ Engineering Controls (IC/EC), and Federal Emergency Response Notification Systemtrack the presence of underground storage tanks, hazardous waste generation, and hazardous material releases. The project site was not listed on any of the regulatory databases reviewed.

The adjacent property to the southeast, 1560 Capalina Road, is listed as a CalEPA Site and HAZMAT San Diego County site on the Envirosite environmental database report. However, based on the current regulatory statuses of the adjacent properties, the adjacent properties are not expected to represent a significant environmental concern to the project site. One CERCLIS NFRAP site is listed within one-half mile of the project site and one RCRA CORRACTS TSD site is listed within one mile of the site. However, based on the relative distance, regulatory status, and/or inferred direction of groundwater flow, the listed sites are not expected to represent a significant environmental concern.

Site Reconnaissance

As presented in the Phase 1 ESA prepared for the proposed project, the project site and surrounding properties were systematically traversed on foot in March 2022 by The Phase One Group. The offsite survey was performed by observing adjacent properties from the project site and adjacent public streets.

The project site was observed to be vacant rough-graded land covered with weeds and a couple of palm trees. The perimeter of the project site is surrounded by a chain-link fence with a gate on the southwest side of the project site along Capalina Road. No structures were observed onsite. Several small piles of what appeared to be construction debris in the form of large rocks were observed along the northwestern portion of the project site. At the time of The Phase One Group's site visit, the site

was unoccupied. No evidence of the use of reportable quantities of hazardous materials and petroleum products or the generation of hazardous waste was observed on the site project site during the site visit.

Wildland Fire

The project site is in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per CalFire's San Marcos Fire Hazards Severity Zones Map and is surrounded by areas identified as a Non-VHFHSZ (CalFire 2009). Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zones (City of San Marcos 2012). A discussion of fire protection services for the proposed project is discussed in Section 3.13, Public Services.

3.8.2 Regulatory Setting

This section details the federal, state, and local regulations governing hazards and hazardous materials.

Federal

Chemical Accident Prevention Provision

The provisions listed under Part 68 of the Code of Federal Regulations (CFR) set forth the list of regulated substances and thresholds, the petition process for adding or deleting substances to the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accident releases, and the state accidental release prevention programs approved under Section 112(r) of the Clean Air Act.

Federal Aviation Regulations, Notice of Proposed Construction or Alteration

The Federal Aviation Administration (FAA), which has primary responsibility for the safety of civil aviation, imposes height restrictions in order to prevent obstructions to navigable airspace to protect flights and surrounding structures. In certain cases, the FAA should be notified of proposed development pursuant to Section 77.11 of Federal Aviation Regulations (FAR). The notification of proposed development enables the FAA to provide a basis for:

- Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;
- Determinations of the possible hazardous effect of the proposed construction or alteration of air navigation;
- Recommendations for identifying the construction or alteration in accordance with current FAA Advisory Circular AC 70/7460-1K dated August 1, 2000, Obstruction Marking and Lighting;
- Determining other appropriate measures to be applied for continued safety of air navigation; and
- Charting and other notification to airmen of the construction or alteration.

Certain jurisdictions can request an FAA evaluation of proposed development when certain features appear to be potentially hazardous.

Federal Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 provided a new set of mitigation plan requirements for state and local jurisdictions to coordinate disaster mitigation planning and implementation. States are encouraged to complete a "Standard" or an "Enhanced" Natural Mitigation Plan. "Enhanced" plans demonstrate increased coordination of mitigation activities at the state level, and, if completed and approved, increase the amount of funding through the Hazard Mitigation Grant Program. California's updated State Hazard Mitigation Plan was adopted in October 2010, and approved by the Federal Emergency Management Agency (FEMA) Region IX. The City of San Marcos is one of the communities covered by the County of San Diego Multi-Jurisdictional Hazard Mitigation Plan, described below, which is a countywide plan that identifies risks posed by natural and human-made disasters.

Hazardous Materials Transport

The U.S. Department of Transportation regulates transportation of hazardous materials between states. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are California Highway Patrol (CHP) and the California Department of Transportation. Together, these agencies determine container types used and license hazardous waste haulers for transportation of hazardous waste on public roads, including explosives that may be used for blasting.

International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what protective measures are required for fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is updated every three years.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives the United States Environmental Protection Agency (USEPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled the USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Hazardous and Solid Waste Amendments of 1984

The Hazardous and Solid Waste Amendments of 1984 amended the Solid Waste Disposal Act of 1965 (SWDA), as amended by the RCRA of 1976. In general, both the scope and requirements of the SWDA, as amended by RCRA, were significantly expanded and reinforced.

State

The state regulations that govern hazardous materials are equal to or more stringent than federal regulations. California has been granted primary oversight responsibility by USEPA to administer and

enforce hazardous waste management programs. State regulations have detailed planning and management requirements to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key state laws pertaining to hazardous wastes are discussed below. In addition, the Department of Toxic Substance Control (DTSC), the State Water Resources Control Board (SWRCB), and the Integrated Waste Management Act also regulate the generation of hazardous materials, also described below.

California Emergency Services Act

The California Emergency Services Act provides the basic authority for conducting emergency operations following a proclamation of emergency by the governor and/or appropriate local authorities. Local government and district emergency plans are considered to be extensions of the California Emergency Plan, established in accordance with the Emergency Services Act.

California Fire Code

The California Fire Code (CFC) is Chapter 9 of CCR Title 24. It is created by the California Building Standards Commission and is based on the IFC created by the International Code Council, described above. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every three years. The CFC is adopted by reference as Chapter 17.64–California Fire Code in the City of San Marcos Municipal Code.

California Health and Safety Code, Hazardous Materials Release Response Plans, and Inventory

Two programs found in the California Health and Safety Code 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 Program (CalARP), which is the state adaptation of CFR Part 68, described above. The Department of Environmental Health is responsible for the implementation of the HMBP program and CalARP 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 (RMP) is required pursuant to the regulation. Congress requires USEPA Region 9 to make RMP information available to the public through the USEPA's Envirofacts Data Warehouse.

California Integrated Waste Management Act

This act requires the development and implementation of household hazardous waste disposal plans. The Department of Resources Recycling and Recovery, formerly the California Integrated Waste Management Board, oversees compliance with this act and enforces operational plans for solid waste facilities.

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 California Environmental Protection Agency (Cal/EPA), CHP, the California Department of Fish and Wildlife, and the Regional Water Quality Control Board (RWQCB).

Emergency Services Act

Under the Emergency Services Act (California Government Code Section 8850 et seq.), the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Quick response to incidents involving hazardous materials or hazardous waste is a key element of this plan. The Governor's Office of Emergency Services administers the plan, coordinating the responses of other agencies, including USEPA, CHP, RWQCBs, air quality management districts, and county disaster response offices.

Government Code Section 65962.5 (Cortese List)

The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by the state and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires Cal/EPA to develop an updated Cortese List annually, at minimum. DTSC is responsible for a portion of the information contained in the Cortese List. Other California state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Hazardous Waste Control Act

The Hazardous Waste Control Act is implemented by regulations contained in California Code of Regulations (CCR) Title 26 that describe requirements for the proper management of hazardous wastes. The act created the state hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The Hazardous Waste Control Act and Title 26 regulations list more than 800 potentially hazardous materials and establish criteria for identifying, packaging, transporting, and disposing of such wastes. Under these regulations, the generator of hazardous waste material must complete a manifest that accompanies the material from the point of generation to transportation to the ultimate disposal location, with copies of the manifest filed with the DTSC.

Unified Program

Cal/EPA delegates to qualifying local agencies oversight and permitting responsibility for certain state programs pertaining to hazardous waste and hazardous materials. This is achieved through the Unified Program, created by state legislation in 1993 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following emergency and management programs:

- Hazardous materials release response plans and inventories (business plans);
- California Accidental Release Prevention Program (CalARP);
- Underground Storage Tank Program;
- Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control and Countermeasure plans;
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (tiered permitting) Programs; and

- California Uniform Fire Code: Hazardous material management plans and hazardous material inventory statements.

The County of San Diego is the designated certified unified program agency for all local jurisdictions within the San Diego region, including San Marcos.

State Responsibility Area Fire Safe Regulations (Title 14 Natural Resources, Department of Forestry Fire Protection)

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in State Responsibility Areas (SRAs). Title 14 regulates that the future design and construction of structures, subdivisions, and developments in an SRA shall provide for basic emergency access and perimeter wildfire protection measures.

Local

Airport Land Use Commission and Airport Land Use Compatibility Plans

Airport Land Use Commissions (ALUC) assist local agencies in ensuring compatible land uses in the vicinity of existing or proposed airport; coordinate planning at state, regional and local levels; prepare and adopt airport land use policies; review plans or regulations submitted by local agencies; and review and makes recommendation regarding the land use, building heights, and other issues related to air navigation safety and the promotion of air commerce. The San Diego County Regional Airport Authority is the ALUC for the San Diego region.

The closest public airport to the project site is the McClellan-Palomar Airport located in the City of Carlsbad, approximately 7.5 miles west of the project site. The McClellan-Palomar Airport Land Use Compatibility Plan (ALUCP) contains policies to promote land use compatibility between the McClellan-Palomar Airport and the adjacent and proximate land uses, to the extent these areas are not already developed with existing uses, and protect the public health, safety, and welfare (San Diego County Regional Airport Authority 2011). Using airport-related forecasts and background data approved by the California Department of Transportation, Division of Aeronautics, the plan reflects anticipated growth of the airport over a 20-year horizon. The plan includes land use compatibility criteria and identifies policies applicable to the airport and surrounding land uses.

According to the McClellan-Palomar ALUCP and Figure 6-5 of the Safety Element of the City's General Plan, the project site lies within Review Area 2 of the airport influence area. The influence area is regulated by the ALUC, which regulates land uses in the area to be compatible with airport-related noise, safety, airspace protection, and over-flight factors through review of development proposals within the airport influence area. Review Area 2 consists of limits on heights of structures in areas of high terrain. Residential development in Review Area 2 may be subject to annoyances commonly associated with proximity to airports, such as noise, vibration, and overflights.

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

To comply with the Disaster Mitigation Act of 2000, the County of San Diego prepared the Multi-Jurisdictional Hazard Mitigation Plan. The plan serves as both a county-wide plan and a plan for local jurisdictions that identifies risks posed by natural and human-made disasters before a hazard event occurs. The plan includes overall goals and objectives shared by many jurisdictions, as well as specific

goals, objectives, and mitigation action items for each of the participating jurisdictions to help minimize the effects of the specified hazards that could potentially affect their jurisdiction. Goals, objectives, and action items for the City of San Marcos are included in this plan.

San Marcos Fire Department Hazard Risk Analysis and Wildland Urban Interface Community Wildfire Protection Plan

The Community Wildfire Protection Plan (CWPP), adopted in December 2007, was developed by the San Marcos Fire Department (SMFD) with guidance from the County of San Diego, California Department of Forestry and Fire Protection and the United States Forest Service. The CWPP supplements San Diego County, Department of Planning and Land use documents. Supplemental to the CWPP, the SMFD published the Hazard Risk Analysis (HRA) for internal City use, incorporating new and existing information relating to wildfire risk within the City to better quantify true risk and management needs. The HRA quantifies, clarifies, and manages the wildland urban interface (WUI) responsibility and meets the requirements of the federal Healthy Forests Restoration Act of 2003 for community fire planning.

City of San Marcos, Ordinance 2003-1216

The City Ordinance 2022-1525 amends Chapter 17.64 of the Municipal Code to adopt the most recent version of the California Fire Code. Currently, this ordinance requires all buildings or structures to provide and maintain an effective fuel modification zone of 150 feet.

City of San Marcos General Plan

The Safety Element of the San Marcos General Plan contains several goals and policies pertaining to hazards and hazardous materials. The following goals and policies apply to the proposed project:

- Goal S-3: Minimize injury, loss of life, and damage to property results from structure or wildland fire hazards.
    - Policy S-3.1: Require development to be located, designed, and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility, and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.
    - Policy S-3.2: Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers.
    - Policy S-3.3: Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.
    - Policy S-3.4: Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.
- Goal S-4: Protect life, structures, and the environment from the harmful effects of hazardous materials and waste.

  - Policy S-4.1: Promote and support the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials in accordance with applicable federal, State, and local regulations.
  - Policy S-4.2: Require areas of known or suspected contamination to be assessed prior to reuse or redevelopment. Plan for reuse of contaminated areas in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.
  - Policy S-4.3: Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected.
  - Policy S-4.4: Avoid locating sensitive uses near established hazardous materials users or industrial areas where incompatibilities would result, except in cases where appropriate safeguards have been developed and implemented.

- Goal S-5: Establish and maintain an effective emergency response program to respond to disasters and maintain continuity-of-life support functions during an emergency.
  - Goal S-5, Policy S-5.3: Develop, implement, and maintain an effective evacuation program for areas of risk in the event of a disaster.
- Goal S-7: Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.
  - Policy S-7.1: Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.

The Environmental Justice Element of the San Marcos General Plan contains several goals and policies pertaining to hazards and hazardous materials. The following goals and policies apply to the proposed project:

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
  - Policy EJ-1.21: Require areas of known or suspected contamination to be assessed prior to reuse or redevelopment. Plan for reuse of contaminated areas in a manner that is compatible with the nature of the contamination and subsequent remediation efforts (See Policy S-4.2).
  - Policy EJ-1.22: Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected (See Policy S-4.3).
  - Policy EJ-1.23: Avoid locating sensitive uses near established hazardous materials users or industrial areas where incompatibilities would result, except in cases where appropriate safeguards have been developed and implemented (See Policy S-4.4).

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. The Safety Element also identifies goals and policies related to seismic, flood, and fire hazards. As detailed in Table 3.10-7 of Section 3.10, the project is consistent with all the applicable goals and policies.

3.8.3 Thresholds of Significance

Based on the *California Environmental Quality Act (CEQA) Guidelines* Appendix G, the following significance criteria have been developed for hazardous materials compliance. A significant impact to or resulting from hazards and hazardous materials would be identified if the project were determined to result in any of the following:

- Threshold #1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Threshold #2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Threshold #3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Threshold #4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- Threshold #5: For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- Threshold #6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Threshold #7: Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.8.4 Project Impact Analysis

The following analysis discusses impacts associated with the thresholds of significance identified in Section 3.8.3, Thresholds of Significance, above.

Hazardous materials include solids, liquids, or gaseous materials that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, could pose a threat to human health or the environment. Hazards with all existing development include the risks associated with potential explosions, fires, or release of hazardous substances in the event of an accident or natural disaster, which may cause or contribute to an increase in mortality or serious illness, or pose substantial harm to human health or the environment.

Threshold #1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Construction

During construction of the proposed project, there is a potential for accidental upset of fuels, lubricants, or various other liquids needed to operate heavy equipment on the project site. These materials include diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. Direct impacts to human health and

biological resources from accidental spills of small amounts of hazardous materials from construction equipment during construction of the buildings could occur in case of accidental spill or upset; however, existing federal and state standards are in place for the handling, storage, and transport of these materials. These include, but are not limited to, the Federal Chemical Accident Prevention Provisions (Part 68 of the Code of Federal Regulations), California Highway Patrol and California Department of Transportation container and licensing requirements for transportation of hazardous waste on public roads, the International Fire Code, The Resource Conservation and Recovery Act of 1976 as amended by the Hazardous and Solid Waste Amendments of 1984, California's Hazardous Waste Control Law, the California Fire Code, California Health and Safety Code Hazardous Materials Release Response Plans and Inventory, the California Integrated Waste Management Act, regulations developed by California Occupations Safety and Health Administration, and the state Hazardous Waste Control Act.

Operations

Operationally, the only hazardous materials anticipated for transport, use, or disposal associated with the proposed mixed-use project would be routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products. The use, handling, and disposal of these products is addressed by household hazardous waste programs that are part of the Integrated Waste Management Plan (IWMP) of the County of San Diego. The Household Hazardous Waste Element of the IWMP specifies the means by which hazardous wastes generated by households shall be collected, recycled, treated, and disposed of safely.

Because compliance with all standards is required through federal, state, county, and municipal regulations, no significant impacts to the public or the environment are expected due to the routine transport, use, or disposal of hazardous materials during project construction or operation. Therefore, proposed project impacts would be **less than significant**.

Threshold #2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Construction

As discussed under Threshold 1, above, construction of the proposed project would entail transport, use, or disposal of potentially hazardous materials including, but not limited to diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. As such, although the use, transport, and disposal of hazardous materials during construction could result in accidental spill or upset, the proposed project would be required to comply with existing environmental regulations that would ensure that the public and environment are protected.

Operations

Future uses proposed within the project area are limited to multi- family residential uses and commercial uses. These types of land uses are not typically characteristic of generating, releasing, or using large amounts of hazardous materials. Industrial uses are not proposed as part of the proposed project. The only hazardous materials anticipated for transport, use, or disposal associated with the completed project are routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products. As stated above, the use,

handling, and disposal of these products are addressed by household hazardous waste programs that are part of the IWMP of the County of San Diego.

Because compliance with all standards is required through federal, state, county, and municipal regulations, no significant impacts to the public or the environment are expected due to the release of hazardous materials. Therefore, the proposed project is not anticipated to 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. Impacts are **less than significant**.

Threshold #3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

The project site is not located within a one-quarter mile of an existing or proposed school. The closest school to the project site is La Mirada Academy, a K-8 school located 0.66 mile southwest of the project site, with State Route-78 and additional development between the project site and the school. Additionally, the uses proposed by the project would not be characterized as those that would emit hazardous emissions or handle hazardous or acutely hazardous materials or substances. No schools are located within 0.25 mile of the project site. **No impact** is identified for this issue area.

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

As part of the Phase 1 ESA prepared for the proposed project, various federal, state, and local regulatory database searches were conducted. The findings of the Phase I ESA concluded that the proposed project site is not located on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5.

The adjacent property to the southeast, 1560 Capalina Road, is listed as a CalEPA Site and HAZMAT San Diego County site on the Envirosite environmental database report. However, based on the current regulatory statuses of the adjacent properties, the adjacent properties are not expected to represent a significant environmental concern to the project site. One CERCLIS NFRAP site is listed within one-half mile of the project site and one RCRA CORRACTS TSD site is listed within one mile of the site. However, based on the relative distance, regulatory status, and/or inferred direction of groundwater flow, the listed sites are not expected to represent a significant environmental concern.

Aerial photographs, topographic maps, and previous reports of the project site were reviewed for evidence of past land uses that had the potential to have impacted the project site through the use, storage, or disposal of hazardous substances and/or petroleum products. Per the Phase I ESA, the project site appeared to be vacant pastureland from prior to 1939 until approximately 1974, when the northwestern perimeter of the project site appeared to be vacant, rough-graded land. By 1980, the project site appeared to be vacant, rough-graded land with what appeared to be an area graded for uses as a vehicle parking area on the southeastern portion of the project site. By 1996, the project site appeared to be vacant, weed-abated land. By 2005, a vehicle parking area appears to be to be located on the southeastern perimeter of the subject project site. By 2012, the vehicle parking area was removed and the project site appeared to be vacant, weed-abated land.

The site reconnaissance confirmed that no obvious indications of the use, storage, or generation of hazardous materials/wastes or petroleum products were observed on or adjacent to the project site. The Phase I prepared for the proposed project concluded there is a low likelihood that recognized environmental conditions are present at the project site as a result of the current or historical land

uses or from a known and reported off-site source. Therefore, the proposed project is not located on a site that is included on a list of hazardous materials sites. Impacts are **less than significant**.

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

The public airport closest to the project site is the McClellan-Palomar Airport, located approximately five miles to the west. According to Figure 6-5 of the Safety Element of the City's General Plan, the project site is located within Review Area 2 of the airport influence area. Review Area 2 limits the heights of structures in areas of high terrain. The project site would not be characterized as an area of high terrain, defined as a maximum height of 795 feet above meal sea level (AMSL) or as in an area of Terrain Penetration to Airspace Surfaces. The elevations on the site range from approximately 580 to 600 feet AMSL. Proposed buildings would be four stories high and range from approximately 51 to 56 feet in heights. The project site is outside of the 60 dBA noise contour generated by airport noise as illustrated in the ALUCP. Nevertheless, Nevertheless, all residential development within Review Area 2 is required to record overflight notification documents as outlined in the McClellan-Palomar ALUCP and per Chapter 20.265 of the City's Municipal Code, notifying residents of potential annoyances commonly associated with proximity to airports, such as noise, vibration, and overflights. This would be required as a condition of project approval. As such, with recording of overflight notification, impacts would be **less than significant.**

Threshold #6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

According to the General Plan Safety Element, the San Marcos Emergency Operations Plan governs the operations of the City during a disaster. This plan addresses response to moderate evacuation scenarios, including the identification of evacuation points and general routes. While specific evacuation routes have not been established, several main thoroughfares would serve as primary evacuation corridors in an emergency. Additionally, San Marcos is included in the San Diego County Multi-Jurisdictional Hazard Mitigation Plan, which was developed to serve as both a county-wide plan and a plan for local jurisdictions to identify risks posed by natural and human-caused disasters before a hazardous event occurs.

Access to the project site would be via two unsignalized driveways on Capalina Road. Both driveways will be ungated and would be 24 feet wide. Internal vehicular movement will be via 24-foot-wide drive aisles. No vehicular access is proposed from West Mission Road.

The proposed project would not impact any roadway or staging areas that are identified in any emergency planning documents. In summary, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be **less than significant**.

Threshold #7: Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Implementation of the proposed project would result in a developed area with structures, and landscape vegetation. The project site is in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per CalFire's San Marcos Fire Hazards Severity Zones Map

(2009) and is surrounded by areas identified as a Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone (City of San Marcos 2012). Therefore, the project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands. Impacts would be **less than significant**.

3.8.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to hazards, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to hazards. All of the cumulative projects identified in Table 2-3 are considered in this cumulative analysis.

Hazards impacts are generally site specific and thus handled on a site-by-site basis. All projects identified in Table 2-3 would require the identification of existing hazardous materials on site, and would be required to comply with existing regulations related to use, transport, and disposal of hazardous materials. Similarly, all related projects would be required to analyze and properly mitigate any impacts to the existing evacuation plan if impacts are identified.

With regard to wildfire hazards, all of the projects proposed within the urban/wildland interface are required to meet minimum fire fuel modification and/or clearing requirements in addition to meeting the applicable standards of the various fire codes in effect at the time of building permit issuance. Currently that is the 2022 California Fire Code, 2022 California Building Code, San Diego County requirements for Enhanced Building Construction and California State Fire Marshal requirements for fire resistive construction. For projects within the City, these requirements are implemented through preparation of and compliance with a Fire Protection Plan, other project-specific design features, which are reviewed and approved by the Fire Marshal. As such, through compliance with existing regulations, cumulative impacts to hazards and hazardous materials would be **less than significant.**

3.8.6 Mitigation Measures

Based upon the analysis presented in Section 3.8.4 and 3.8.5, no impacts were identified and no mitigation measures are required.

3.8.7 Conclusion

As discussed in Section 3.8.4, above, the project site is currently vacant and is not listed on any hazardous materials sites. Furthermore, construction and operation of the proposed project is not expected to result in the release of any significant hazardous materials or the routine transport, use, or disposal of such materials. Development of the proposed project would not result in any safety hazards resulting from proximity to the McClellan-Palomar Airport, however, the project site is located within Review Area 2 of the McClellan-Palomar airport influence area and, although not significant, future residents on the project site may be subject to periodic nuisance from aviation activity including noise, vibration, and overflights. Recordation of overflight notification documents that detail the

potential disturbances that may be experienced for future residents would be required pursuant to the City's Municipal Code. Further the project would not impair implementation of or physically interfere with emergency response or evacuation plans. Lastly, the project site is not designated as a high fire severity zone, and the project would be constructed in accordance with all applicable fire codes. As such, project- level and cumulative-level impacts due to hazards and hazardous materials would be less than significant.

3.9 Hydrology and Water Quality

Introduction

This section identifies the existing hydrologic and water quality conditions on the project site and analyzes the potential impacts of the proposed project on hydrology and water quality. The analysis in this section is based upon the following reports which are included as **Appendix K and Appendix L** of this Environmental Impact Report (EIR):[12]:

- *Priority Project Hydrology Study for Capalina Apartments*, prepared by Excel Engineering, June 12, 2023 (Excel 2023a).
- *Priority Development Project Stormwater Quality Management Plan (SWQMP)* for Capalina Apartments, Capalina Road, San Marcos, CA 92069, prepared by Excel Engineering, June 12, 2023 (Excel 2023b).

The preliminary drainage report and SWQMP discusses applicable hydrologic volume and storm water requirements and analyzes peak flow anticipated for preliminary design of the on-site storm drain system. The analysis in this section also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G and applicable State and Local regulations, including the City of San Marcos General Plan.

In the Initial Study prepared for the proposed project (**Appendix B.1),** it was determined to have no impact on the following hydrology/water quality-related issue areas: groundwater supplies depletion, risk release of pollutants due to project inundation in flood hazard, tsunami or seiche zones. Therefore, these issues are not discussed further in this EIR section. Section 5.5, Environmental Effects Found Not to be Significant – Hydrology and Water Quality, this EIR provides additional information on these topics.

Table 3.9-1 summarizes the project- and cumulative-level hydrology and water quality impact analysis by threshold.

Table 3.9-1. Hydrology/Water Quality Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1: Violate any water quality standards or waste discharge requirements or other substantially degrade surface or groundwater quality?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

[12] Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#5: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: impede or redirect flood flows?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#6: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#7: Result in significant alteration of receiving water quality during or following construction?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#8: Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#9: Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#10: Be tributary to environmentally sensitive areas (e.g., MSCP, RARE, Areas of Special Biological Significance, etc.)? If so, can it exacerbate already existing sensitive conditions?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#11: Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.9.1 Existing Conditions

This section details the existing hydrology, water quality and groundwater conditions on the project site.

Site Hydrology

The project site is currently vacant and undeveloped. The project fronts on W. Mission Road to the north and Capalina Road to the south. Per the hydrology report, the property drains primarily by overland flow to W. Mission Road then easterly along the W. Mission Road curb and gutter to an existing storm drain system located at North Pacific Street (Excel 2023a).

Water Quality

The proposed project is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into eleven hydrologic units. The project site is located in the Richland Hydrologic Subarea (904.52) within the San Marcos Hydrologic Area (904.5) of the Carlsbad Watershed (Hydrologic Unit (904). The project site discharges to a public storm drain system which flows to an un-named tributary that flows to San Marcos Creek (passing through Lake San Marcos) to Batiquitos Lagoon, which discharges to the Pacific Ocean.

The Carlsbad Watershed Management Area (WMA) is approximately 211 square miles and is formed by a group of six individual watersheds in northern San Diego County. The WMA is bordered by the San Luis Rey River WMA to the north and by the San Dieguito River WMA to the south. It reaches inland nearly 24 miles to just northeast of Lake Wohlford. The maximum elevation of the WMA is approximately 2,400 feet and it extends to sea level at the Pacific Ocean. The Carlsbad WMA is made up of six distinct Hydrologic Areas (HA)s: Loma Alta, Buena Vista Creek, Agua Hedionda, Encinas, San Marcos Creek, and Escondido Creek. The WMA includes the entire Cities of Carlsbad, San Marcos and Encinitas and portions of the cities of Oceanside, Vista, Escondido, Solana Beach, and San Diego County unincorporated areas.

The San Marcos Hydrologic Area is the second largest within the WMA. It is about 36,000 acres in area and comprises approximately 28% of the Carlsbad WMA. The major receiving waters within the Hydrologic Area are San Marcos Creek, Encinitas Creek, Batiquitos Lagoon, and the Pacific Ocean. San Marcos Creek originates on the western slopes of the Merriam Mountains in west central San Diego County and discharges to the Pacific Ocean, 14.6 miles away, via Batiquitos Lagoon. Encinitas Creek is another one of the major tributaries in the HA, originating in the hills southwest of Questhaven Road

and paralleling El Camino Real before it converges with San Marcos Creek at the southeastern corner of Batiquitos Lagoon. The highest elevation within the HA is approximately 1,540 feet above mean sea level (amsl). Lake San Marcos is the largest impoundment within the HA. The San Marcos HA is primarily located in the cities of San Marcos, Carlsbad, Encinitas, and the County of San Diego, with a small portion in Escondido.

The San Marcos HA has two distinctive areas separated by the Lake San Marcos impoundment – the Upper and Lower San Marcos HA areas. The Upper Hydrologic Area includes drainage areas in the County of San Diego, and the cities of San Marcos and Escondido, that runoff through Upper San Marcos Creek to Lake San Marcos. The Lower Hydrologic Area consists of portions of the cities of Carlsbad, Encinitas, San Marcos, and Vista (Carlsbad Watershed Management Area 2022).

Within the Water Quality Control Plan for the San Diego Basin (San Diego Basin Plan), San Marcos Creek and Batiquitos Lagoon, located downstream of the project site, are identified as having numerous beneficial uses. For San Marcos Creek, these beneficial uses are: Agricultural Supply (AGR), Contact Water Recreation (REC1), Non-Contact Water Recreation (REC2), Warm Freshwater Habitat (WARM) and Wildlife Habitat (WILD). For Batiquitos Lagoon, these uses are: REC1, REC2, Preservation of Biological Habitats of Special Significance (BIOL), Estuarine Habitat (EST), WILD, Rare, Threatened, or Endangered Species (RARE), Marine Habitat (MAR), Migration of Aquatic Organisms (MIGR), and Spawning, Reproduction, and/or Early Development (SPWN). The Basin Plan includes identifies numerical and qualitative water quality objectives to protect the listed beneficial uses for each water body.

The San Marcos Creek system consists of a number of water bodies that are listed as impaired under Section 303(d) of the Clean Water Act. In accordance with Section 303(d) of the 1972 Federal Clean Water Act (CWA), the State Water Resources Control Board (SWRCB) has established a list of "impaired water bodies." San Marcos Creek is listed on the 2020-2022 Integrated Report (CWA Section 303(d)/ 305(b)) List of Impaired Water Segments as being impaired for Nutrients (nitrogen and phosphorus), Metals (selenium), Total Toxics (toxicity), Other Causes (Benthic Community Effects), Pesticides (bifenthrin, dichlorodiphenyldichloroethylene (DDE) and pyrethroids), Pathogens (indicator bacteria), and total dissolved solids. Further downstream, Batiquitos Lagoon is also listed as being impaired for toxicity. Furthermore, San Marcos Lake was identified under Section 303(d) of the Clean Water Act as impaired due nutrients (ammonia as nitrogen and phosphorous, and metals (copper) (SWRCB 2022).

3.9.2 Regulatory Setting

This section details the applicable federal, state, and local regulations pertaining to hydrology and water quality.

Federal

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The standard for flood protection is established by FEMA, with the minimum level of flood protection for new development determined to be the one percent-annual exceedance probability (i.e., the 100-year flood event). Per FEMA's Flood Insurance Rate Map Number 06073C0789H, the project site is not located within a 100-year flood hazard area (FEMA 2012).

Federal Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1977.

Under the CWA, the U.S. Environmental Protection Agency (USEPA) has implemented pollution control programs such as setting wastewater discharge standards for industry. The USEPA has also set water quality standards for contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters unless a permit was obtained.

Section 303(d) of the Clean Water Act

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that would not attain water quality objectives after implementation of required levels of treatment by point-source dischargers (municipalities and industries). Section 303(d) requires that the state develop a total maximum daily load (TMDL) for each of the listed pollutants. The TMDL is the amount of loading that the water body can receive and still be in compliance with water quality objectives. The TMDL can also act as a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. The TMDL prepared by the state must include an allocation of allowable loadings to point and non-point sources, with consideration of background loadings and a margin of safety. The TMDL must also include an analysis that shows the linkage between loading reductions and the attainment of water quality objectives. USEPA must either approve a TMDL prepared by the state or, if it disapproves the state's TMDL, issue its own. National Pollutant Discharge Elimination System (NPDES) permit limits for listed pollutants must be consistent with the waste load allocation prescribed in the TMDL. After implementation of the TMDL, it is anticipated that the problems that led to placement of a given pollutant on the Section 303(d) list would be remediated.

National Pollutant Discharge Elimination System

The NPDES permit system was established in the federal CWA to regulate municipal and industrial discharges to surface waters of the U.S. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that USEPA must consider in setting effluent limits for priority pollutants.

Non-point sources are diffuse and originate from a wide area rather than from a definable point. Non-point pollution often enters receiving waters in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such non-point sources are generally exempt from federal NPDES permit program requirements. However, three types of non-point source discharges are controlled by the NPDES program: non-point source discharge caused by general construction activities, the general quality of stormwater in municipal stormwater systems, and discharges associated with industrial operations. The 1987 amendments to the CWA directed USEPA to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by USEPA that are not included in Phase I.

In accordance with NPDES regulations, in order to minimize the potential effects of construction runoff on receiving water quality, the State requires that any construction activity that disturbs one acre or

more must obtain a General Construction Activity Stormwater Permit. Permit applicants are required to prepare a stormwater pollution prevention plan (SWPPP) and implement best management practices (BMPs), such as erosion and sediment control and non-stormwater management measures, to reduce construction effects on receiving water quality.

Examples of typical BMPs implemented in SWPPPs include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water.

State

California Water Code Division 7 (Porter-Cologne Act)

The California Water Code contains provisions regulating water and its use. Division 7 establishes a program to protect water quality and beneficial uses of the state water resources including groundwater and surface water. The SWRCB and RWQCB administer the program and are responsible for control and water quality. They establish waste discharge requirements, oversee water quality control planning and monitoring, enforce discharge permits, and establish ground and surface water quality objectives.

State Water Resources Control Board

In California, the SWRCB has broad authority over water-quality control issues for the State. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the State by the Federal government under the CWA. Other State agencies with jurisdiction over water quality regulation in California include California Department of Public Health (for drinking water regulations), the California Department of Pesticide Regulation, the California Department of Fish and Wildlife, and the Office of Environmental Health and Hazard Assessment.

In accordance with Section 303(d) of the CWA, the SWRCB has established a list of "impaired water bodies." Impaired water bodies in this watershed, as listed in the SWRCB 303(d) impaired waters list, include San Marcos Creek. San Marcos Creek is listed on the 2014-2016 CWA Section 303(d) List of Impaired Water Segments as being impaired for DDE, phosphorus, sediment, toxicity, and selenium. Batiquitos Lagoon is also listed as being impaired for eutrophic, indicator bacteria, sediment, siltation, and toxicity. San Marcos Lake was identified under Section 303(d) of the Clean Water Act as impaired due to high concentrations of nitrogen and nutrients.

Regional Water Quality Control Board

The project site is situated within the jurisdiction of the San Diego RWQCB (Region 9). The San Diego RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction.

The project site is located within the Richland Hydrologic Subarea (904.52) of the San Marcos Hydrologic Area (904.5) of the Carlsbad Watershed Hydrologic Unit (904). Water quality objectives for San Marcos Creek and Batiquitos Lagoon are specified in the Water Quality Control Plan for the San Diego Basin (Basin Plan) prepared by the RWQCB in compliance with the federal CWA and the Porter-Cologne Act. The Basin Plan establishes water quality objectives and implementation programs to

meet stated objectives and to protect the beneficial uses of water in the lagoon and creek. Because the City of San Marcos is located within the RWQCB's jurisdiction, all discharges to surface water or groundwater are subject to the Basin Plan requirements (RWQCB 1994).

In May 2013, the San Diego RWQCB adopted Order R9-2013-0001, the new municipal NPDES permit for 39 municipal, county government, and special district entities located in southern Orange County, southwestern Riverside County, and San Diego County who own and operate large municipal separate storm sewer systems (MS4s) which discharge storm water runoff and non-storm water runoff to surface waters throughout the San Diego Region. This permit has requirements for development projects to minimize or eliminate the impacts of such development on water quality. The proposed project is subject to the requirements of the municipal permit as it is implemented via the Carlsbad Watershed Jurisdictional Urban Runoff Management Program. The specific requirements include the selection of appropriate BMPs to avoid, prevent, or reduce the pollutant loads entering the storm drain system and receiving waters. The permit was amended in February 2015 by Order R9-2015-0001 and in November 2015 by Order R9-2015-0100.

Provision D.1.a of Order R9-2013-0001 requires the San Diego Stormwater Co-permittees to continue water monitoring programs established within previous Orders and pursuant to the approved Hydromodification Management Plan (HMP) (January 2011). The City of San Marcos is one of the co-permittees.

To comply with Order R9-2013-0001, as amended, the 2016 Regional Model BMP Design Manual was developed to provide San Diego Region-specific project design and post-construction storm water requirements for development projects and replace the prior San Diego Regional Model Standard Urban Stormwater Mitigation Plan (SUSMP). The City of San Marcos adopted its own BMP Design Manual in February 2016 and updated it in February 2023. The BMP Design Manual was used to recommend BMPs and low impact development (LID) features for the proposed project. LID is an approach to land development that uses multiple small-scale natural detention and filtration features to manage stormwater as close to its source as possible. LID employs principles such as preserving and re-creating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Local

Carlsbad Watershed Management Area Water Quality Improvement Plan

The Carlsbad Watershed Management Area (WMA) Water Quality Improvement Plan (WQIP) is a requirement of stormwater regulations adopted by the RWQCB according to Order No. R9-2013-0001, as amended by Order Nos. R9 2015-0001 and R9-2015-0100. The goal of the WQIP is to protect, preserve, enhance, and restore water quality of receiving water bodies. These improvements in water quality will be accomplished through an adaptive planning and management process that identifies the highest priority water quality conditions within the watershed and implements strategies to address them. Agencies involved in the development of the WQIP include the County of San Diego and the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. The purpose of the Carlsbad WMA WQIP is to guide the Responsible Agencies' Jurisdictional Runoff Management Programs (JRMP)s toward achieving improved water quality in MS4 discharges and receiving waters. Through the WQIP, priorities and goals are established and strategies selected for implementation through the Responsible Agencies' JRMPs to progress toward improvements in water quality. This approach establishes the WQIP as the overarching plan that each Responsible Agency will use to develop and implement their jurisdictional programs. Responsible Parties' JRMPs contain the

strategies, standards, and protocols by which each Responsible Agency will implement their individual program in response to the priorities and goals established in the WQIP. The WMA collective watershed strategy identifies nutrients as high priority water quality pollutants in the San Marcos Creek Hydrologic Area (Carlsbad Watershed Management Area Responsible Agencies 2022).

The Carlsbad WMA WQIP includes several major components:

- Priority Water Quality Conditions: after assessing available data sets, the water quality conditions in the watershed were prioritized and several were identified as those on which Responsible Agencies would focus their program efforts. These are identified as highest and priority water quality conditions. This does not mean that other water quality conditions or pollutants are to be ignored. On the contrary, many water quality conditions are related to one another in terms of the strategies selected to address them. Selected strategies to address priority water quality conditions are also effective at addressing many other pollutants and water quality conditions. The highest priority water quality condition for Escondido Creek and San Elijo Lagoon are indicator bacteria.
- Numeric Goals and Schedules: the WQIP establishes goals related to the highest priority water quality conditions. Furthermore, schedules for achieving these goals are included in the WQIP. Together, the goals and schedules establish the targets that the Responsible Agencies use for both establishing their programs as well as measuring progress and achievement. Each highest priority water quality condition has established interim and final goals and schedules.
- Strategies and Schedules: the WQIP identifies the strategies, or activities/BMPs, that the Responsible Agencies will implement to address the priority water quality conditions to progress towards achieving the numeric goals within the schedules identified. In addition to identifying the strategies, the WQIP identifies schedules for development (in some cases) and implementation of the strategies.

The Carlsbad WQIP was originally submitted to the RWQCB in June 2015 and after revisions based on RWQCB comments, an acceptance letter from the Regional Board was issued on November 22, 2016. A 2021 update has been initiated, primarily to incorporate an assessment of bacteria data for Agua Hedionda Lagoon and revisions noted in prior Annual Reports. The 2021 WQIP was submitted to the Regional Board in January 2021 and the revised WQIP was accepted in December 2021.

City of San Marcos Jurisdictional Runoff Management Plan

The Order (NPDES Permit CAS0109266) requires the City of San Marcos to develop and implement a Jurisdictional Runoff Management Plan (JRMP) that identifies and describes the methods that the City will use to eliminate significant pollutants from the City's Storm Water Conveyance System. The purpose of the City's JRMP is to implement strategies that effectively prohibit non-stormwater discharges to the MS4 and reduce the discharge of pollutants in stormwater to the maximum extent practicable (MEP). Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies (City of San Marcos 2017).

San Marcos Storm Water Standards

The City has adopted its own BMP Design Manual (updated in February 2023) and the proposed project must comply with the standards and regulations contained therein.

San Marcos General Plan

Conservation and Open Space Element

The following are applicable goals and policies from the City of San Marcos General, Conservation and Open Space Element related to hydrology and water quality:

- Goal COS-6: Protect and restore appropriate surface water and groundwater beneficial uses through prioritizing the improvement of locally impaired water bodies within the City of San Marcos subwatersheds.
    - Policy COS-6.2: Promote watershed stewardship as the community norm.
- Goal COS-7: Achieve sustainable watershed protection for surface and ground water quality that balances social, economical, and environmental needs.
- Goal COS-8: Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.
    - Policy COS-8.1: Identify pollutants of concern in each subwatershed for groundwater and surface water.
    - Policy COS-8.4: Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, BMPs, LID, hydromodification strategies consistent with the Current San Diego RWQCB Municipal Stormwater NPDES Permit, and all future municipal stormwater permits.

Safety Element

The following goal and policy in the City of San Marcos General Plan, Safety Element are applicable to flooding and flood control:

- Goal S-2: Minimize the risk to people, property, and the environment due to flooding hazards.
    - Policy S-2.2: Require existing private development to take responsibility for maintenance and repair of structures to resist flood damage.

Land Use and Community Design Element

The following goal and policies in the City of San Marcos General Plan, Land Use and Community Design Element are applicable to storm water drainage facilities:

- Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.
    - Policy LU-2.7: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.
- Goal LU-15: Flood control and storm water drainage facilities: ensure adequate flood control and storm water drainage is provided by the community.
    - Policy LU-15.1: Implement activities, practices, procedures, or facilities that avoid, prevent, or reduce pollution of the San Marcos Storm Water Conveyance System and receiving waters.

- Policy LU-15.2: Improve inadequate or undersized drainage/flood control facilities to solve both small neighborhood and large regional drainage and flood control problems.
- Policy LU-15.3: Avoid, to the extent possible, development in floodplain and flood prone areas.
- Policy LU-15.4: Retain drainage courses in their natural condition, to the extent possible. Consider smaller-scale drainage improvements to protect the environment and avoid disturbing natural drainage courses; consider detention areas and raised building pads.

Environmental Justice Element

The following goal and policies in the City of San Marcos General Plan, Environmental Justice Element are applicable to storm water drainage facilities:

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
  - Policy EJ-.1.5: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce stormwater runoff (See Policy LU-2.7).
  - Policy EJ-1.17: Identify pollutants of concern in each subwatershed for groundwater and surface water (See Policy COS-8.1).

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies.

City of San Marcos Ordinances

The Storm Water Management and Discharge Control Ordinance (San Marcos Municipal Code Chapter 14.15) requires that all new development and redevelopment activities comply with the stormwater pollution prevention requirements. These stormwater pollution prevention requirements, which are described in detail in Section 14.15.050 of the Municipal Code "Reduction of Pollutants in Storm Water," include construction, development, and redevelopment, and residential BMPs.

3.9.3 Thresholds of Significance

Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* provides thresholds for determining significant environmental impacts related to hydrology and water quality. A project may be deemed to have a significant impact on hydrology/water quality if the project would:

- Threshold #1: Violate any water quality standards or waste discharge requirements or other substantially degrade surface or groundwater quality.
- Threshold #2: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site.
- Threshold #3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

- Threshold #4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Threshold #5: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: impede or redirect flood flows.
- Threshold #6: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.
- Threshold #7: Result in significant alteration of receiving water quality during or following construction.
- Threshold #8: Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).
- Threshold #9: Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?
- Threshold #10: Be tributary to environmentally sensitive areas (e.g., MSCP, RARE, Areas of Special Biological Significance, etc.)? If so, can it exacerbate already existing sensitive conditions?
- Threshold #11: Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?

As identified earlier in this section, impacts related issue area: risk release of pollutants due to project inundation in flood hazard, tsunami or seiche zones as well as impacts to groundwater recharge are not discussed in this section. Chapter 5.0, Environmental Issues Found Not to be Significant, provides additional information on this topic.

3.9.4 Project Impact Analysis

The following analysis discusses the potential for the proposed project to result in impacts to hydrology and water quality. A Hydrology Study and Priority Development Project (PDP) Storm Water Quality Management Plan were prepared for the project by Excel Engineering (2023a and 2023b) and are included in **Appendices K and L**.

Post-Development Drainage Pattern

This proposed project is a mixed-use multifamily residential development containing two buildings and associated surface parking and supporting utilities. Proposed drainage facilities include two biofiltration basins, an underground storage tank used to reduce the project's peak flow and associated storm drain systems which outlet to W. Mission Road. Two biofiltration basins are proposed to mitigate the storm water quality for the project (BMP-A and BMP-B). BMP-A is located near the northeast corner of the site and BMP-B is located near the northwest corner of the site. The biofiltration basins will collect the storm water runoff from the building and proposed parking lots and convey the

storm water through storage tanks, storm drain systems and curb and gutters to the point of confluence (POC) (Excel 2023a).

At the center of the project site, the proposed impervious area runoff will be routed northerly to BMP-A. From BMP-A, runoff will flow through the catch basin at the southern end of BMP-A to act as a control structure to divert water to the proposed 48 -inch storage pipe system (BMP C). After detention in this storage pipe system, the system will outflow through a 12-inch storm drain to discharge point 1, which is located at the northeast corner of the project site. BMP-A will also have an emergency overflow which exits through a 12-inch storm drain to the same discharge point 1.

At the northwest part of the project site, surface runoff will follow the proposed grades through curb cuts to BMP-B. BMP-B then drains through a 12-inch storm drain to a curb outlet at W. Mission Road. These flows confluence with the existing surface flow along W. Mission Road and drains easterly along the curb and gutter to the discharge point 1.

The south portion of the project site and the proposed right-of-way improvements along Capalina Road (including curb and gutter) will drain easterly along the proposed curb and gutter, to discharge point 2, located at the southeast corner of the project site. After runoff leaves discharge point 1 and discharge point 2, the drainage will follow the existing curb and gutter to the east to the inlet in North Pacific Street, the project's POC (Excel 2023a).

Biofiltration and Site BMPs

As discussed above, two biofiltration basins are proposed to mitigate the storm water quality for the project (BMP-A and BMP-B). Biofiltration facilities are vegetated surface water systems that filter water through vegetation, and soil or engineered media prior to discharge via underdrain or overflow to the downstream conveyance system. Biofiltration facilities have limited or no infiltration. They are typically designed to provide enough hydraulic head to move flows through the underdrain connection to the storm drain system. Nutrient sensitive media will be used in the biofiltration basin to provide treatment as San Marcos Creek is a 303(d) listed water body impaired by nutrient pollutant sources (Excel 2023b).

The biofiltration basin would be subject to regular inspection and maintenance. The property owner is required, pursuant to the City's Municipal Code Section 14.15 and the BMP Design Manual, to enter into a stormwater management and discharge control maintenance agreement for the installation and maintenance of permanent BMPs prior to issuance of permits. A maintenance agreement shall be recorded with the County of San Diego Recorder's Office, clarifying maintenance roles and responsibilities. These comprehensive inspection and maintenance requirements will be included as conditions of approval for the proposed project.

A green street vegetated swale (BMP-D) is proposed at the south side of the project site on Capalina Road. Green street infrastructure reduces stormwater runoff and helps improve water quality. Green streets provide source control of stormwater by biofiltration, and limit stormwater transport and pollutant conveyance to the collection system through storage layer and filter media. Per the County of San Diego 2020 BMP Manual, green streets restore predevelopment hydrology to the extent possible by slowing the runoff down and allowing for infiltration; and provide environmentally enhanced roads (County of San Diego 2020).

In addition to the biofiltration features, which are considered structural BMPs, the proposed project would also incorporate source control and site design BMPs as identified in the preliminary SWQMP for the proposed project (Appendix L). Source control BMPs include but are not limited to 1) preventing

illicit discharges into the MS4; 2) stenciling the future on-site public road storm drain inlets; and 3) protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal.

Site design BMPs include but are not limited to 1) maintaining natural drainage pathways and hydrologic features; 2) conserving natural areas, soils, and vegetation; 3) minimizing impervious areas; 4) minimizing soil compaction; 5) runoff collection through multiple private inlets; and 6) landscaping with native or drought tolerant species.

Threshold #1: Violate any water quality standards or waste discharge requirements or other substantially degrade surface or groundwater quality?

Pollutants generated by development projects could include sediments, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides. These pollutants can make their way to drainages and watercourses where they can degrade surface water quality, and in some cases groundwater quality. The project would discharge to an un-named tributary that flows to San Marcos Creek, which discharges to Batiquitos Lagoon, which discharges to the Pacific Ocean (Excel 2023b).

The proposed project would comply with all applicable water quality standards and waste discharge requirements. The proposed project includes a comprehensive water quality management approach that includes the use of biofiltration features and source control and site design BMPs to ensure that there would not be an increase in pollutant discharge to receiving waters. No flow-thru treatment BMPs are proposed to be implemented on site in lieu of retention or biofiltration. The stormwater management design for the project was developed following the forms and checklists found in the BMP Design Manual for Permanent Site Design, Storm Water Treatment and Hydromodification Management (City of San Marcos 2023).

The BMP Design Manual provides the guidance necessary to comply with the performance standards presented in Order R9-2013-0001 as amended (RWQCB 2015). This order indicates that discharges from MS4s must not cause or contribute to the violation of water quality standards in any receiving water (RWQCB 2015, Page 18).

In accordance with NPDES regulations, the State requires that any construction activity that disturbs one acre or more must obtain a General Construction Activity Stormwater Permit. Permit applicants are required to prepare a SWPPP and implement BMPs, including erosion and sediment control and non-stormwater management measures, to reduce construction effects on receiving water quality. Since the proposed project includes disturbance to more than one acre, a General Construction Activity Stormwater Permit from the SWRCB would be required prior to the issuance of a grading permit. A SWPPP would also be developed and implemented in accordance with the appropriate Risk Level, as determined by the City Engineer. Preparation and implementation of the SWPPP would ensure compliance with the provisions of the NPDES General Permit.

As previously noted, the proposed project has been designed to comply with the land development requirements of Order R9-2013-0001 as amended and the BMP Design Manual. These requirements were used to recommend BMPs for the proposed project to ensure there would be no impacts. Long-term water quality and HMP requirements are mitigated through appropriate design requirements for commercial, parking lot, and street land uses. The proposed project is therefore in compliance with the RWQCB MS4 permit.

In summary, the proposed project would not violate any water quality standards or waste discharge requirements. Impacts would be **less than significant**.

Threshold #2: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site?

This section analyzes the potential for the proposed project to alter existing drainage patterns in a way that results in substantial erosion or siltation on- or off-site.

Short Term (Project Construction)

The project site would be graded to prepare the site for development. The project's grading plan includes an erosion control plan that identifies appropriate construction BMPs, such as the use of gravel bags, construction fencing, hydroseed, silt fencing and construction entrances to be implemented during construction. The erosion control plan and SWPPP ensure that minimal sediment or erosion leave the construction site and reduced any stormwater pollutants during construction. The proposed project would not result in substantial erosion or siltation on- or off-site during project construction.

Long Term (Project Operation)

The proposed project would increase the area of impervious surface on the project site. If not carefully planned for, increased runoff from impervious surfaces could cause alterations to drainage courses, increases in erosion and siltation, and increases in flooding due to increased runoff. However, the proposed project has been designed to carefully handle runoff and to meet regulatory requirements to ensure that post-development runoff quantities and rates are similar to or less than the pre-development condition.

The project site is currently vacant. Grading will consist of approximately 4,030 cubic yards (cy) of cut material and 12,270 cy of fill material requiring an import of approximately 8,240 cy of material. The proposed project would incorporate construction BMPs in compliance with the General Construction Permit and SWPPP. In addition to the biofiltration features, which are considered structural BMPs, the proposed project would also incorporate source control and site design BMPs as identified in the preliminary SWQMP for the proposed project (**Appendix L**). Source control BMPs include but are not limited to 1) preventing illicit discharges into the MS4; 2) stenciling the future on-site public road storm drain inlets; and 3) protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal. Site design BMPs include but are not limited to 1) maintaining natural drainage pathways and hydrologic features; 2) conserving natural areas, soils, and vegetation; 3) minimizing impervious areas; 4) minimizing soil compaction; 5) runoff collection through multiple private inlets; and 6) landscaping with native or drought tolerant species. These BMPs have been designed in a manner to be consistent with the requirements of the BMP Design Manual (City of San Marcos 2023) which requires that no pollutants are discharged to the MS4s. Per the BMP Design Manual (Page 1-4) all development projects, or phases of development projects, are required to implement temporary erosion, sediment, good housekeeping and pollution prevention BMPs to mitigate storm water pollutants during the construction phase. Short term, construction-related impacts would be **less than significant.**

The drainage study for the proposed project identifies the pre- and post-development conditions for runoff rates and quantities (Excel 2023a, Table 1, Q100 Analysis Results). The 100-year existing/predevelopment total flows from the project area are approximately 7.198 cubic feet per second (cfs). In the post development condition, the flows would increase to 21.136 cfs. However, with storage and retention, the flows would be 7.162 cfs. Runoff quantities and rates are less than in the post-development condition due to the incorporation of biofiltration and source control and site design BMPs.

The project boundary was compared with the areas of the County with Potential Critical Coarse Sediment Yield Areas (CCSYA). No areas of potential CCSYA are present on this project (Excel 2023b).

In summary, implementation of the proposed project would not increase the rate or quantities of runoff beyond the pre-development condition. The proposed project therefore meets the applicable peak flow discharge requirements (Excel 2023a). The proposed project would not 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 (e.g., downstream). Long term impacts would be **less than significant**.

Threshold #3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

As identified in response to Threshold #2, the proposed project would increase the area of impervious surface on the project site which could increase runoff flow rates or volumes. However, the proposed project has been designed to carefully handle runoff and meet regulatory requirements to ensure that post-development runoff quantities and rates are similar or less than the pre-development condition. Specifically, post-development runoff rates would be less than in the pre-development condition due to the incorporation of biofiltration, source control and site design BMPs (Excel 2023a). Therefore, the proposed project would not create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes. Impacts would be **less than significant**.

Threshold #4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project proposes a comprehensive approach to stormwater and drainage management. This includes two biofiltration basins, a green street vegetated swale and source control and site design BMPs that would detain and retain stormwater flows from the project site. The treated stormwater from the biofiltration features (water quality and hydromodification) would be discharged to the storm drain system. Since the runoff will be treated for hydromodification before it enters the system, no changes to downstream flow rates or storm drain capacity are expected.

As described above, the proposed project would not generate increased runoff volumes. Additionally, project-related runoff would be adequately treated prior to discharge into planned drainage systems via biofiltration and BMPs such that the proposed project would not provide substantial additional sources of polluted runoff (Excel 2023a). Off-site storm drains will not be adversely affected by the proposed project as the project would mitigate all storm water flows to be less than existing conditions. The proposed project would not contribute any increase in flows to existing storm drain infrastructure. The proposed project meets all current storm water and hydrology requirements, including hydromodification. An expansion of existing facilities would not be required to serve the proposed project.

Therefore, the proposed project would not 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. Impacts would be **less than significant**.

Threshold #5: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: impede or redirect flood flows?

As identified in response to Threshold #2, the proposed project would increase the area of impervious surface on the project site which could increase runoff flow rates or volumes; however, the project has been designed to carefully handle runoff and meet regulatory requirements to ensure that post-development runoff quantities and rates are similar or less than the pre-development condition. Specifically, post-development runoff rates would be less than in the pre-development condition due to the incorporation of biofiltration, source control and site design BMPs (Excel 2023a). Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows. Impacts would be **less than significant**.

Threshold #6: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is not located within a sustainable groundwater management plan area. It is located within the Carlsbad Management Area WQIP. The goal of the WQIP is to protect, preserve, enhance, and restore water quality of receiving water bodies. These improvements in water quality will be accomplished through an adaptive planning and management process that identifies the highest priority water quality conditions within the watershed and implements strategies to address them. The City of San Marco's Jurisdictional Runoff Management Plan (JRMP)'s purpose is to implement strategies that reduce the discharge of pollutants in stormwater to the maximum extent practicable, leading to beneficial effects on the local receiving water bodies. If a project would not result in a significant alteration of receiving water through the discharge of pollutants, it would be consistent with the WQIP and JRMP.

Short Term

The proposed project would incorporate construction BMPs in compliance with the General Construction Permit and SWPPP. Potential construction-related impacts to receiving water quality could include siltation and erosion, the use of fuels for construction equipment, and the generation of trash and debris from the construction site. In accordance with NPDES regulations, the project will be required to secure a General Construction Activity Stormwater Permit, which will require the preparation of a SWPPP and implementation of BMPs. Examples of typical BMPs implemented in SWPPPs that could be applicable to the project include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water. These measures are designed to minimize the generation of pollutants, including sediment and trash/debris and would ensure that the proposed project would not result in significant alteration of receiving water quality during construction. Impacts would be **less than significant**.

Long Term (Project Operation)

Buildout of the proposed project would increase the amount of imperviousness at the project site; however, based upon the analysis in the preliminary SWQMP prepared for the proposed project, the

proposed project includes a comprehensive water quality management approach that incorporates biofiltration features and source control and site design BMPs to ensure that there would not be an increase in pollutant discharge to receiving waters. The biofiltration features and BMPs would also be subject to regular inspection and maintenance as per the preliminary SWQMP (**Appendix L**).

As identified above, impaired water bodies in the Carlsbad Watershed, within which the project site is located, include San Marcos Creek, Batiquitos Lagoon, and the Pacific Ocean. Potential pollutants to be generated by development projects include sediment, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

The BMP Design Manual (Page 2-8) requires Biofiltration BMPs be designed to have an appropriate hydraulic loading rate to maximize storm water retention and pollutant removal, as well as to prevent erosion, scour, and channeling within the BMP (City of San Marcos 2023). This requirement results in reductions in pollutants. Biofiltration has a high efficiency for removal of sediments, nutrients, trash, metals, oil/grease, organics, and oxygen demanding substances and has a medium efficiency for removal of bacteria. No flow-thru BMPs are proposed in lieu of retention or biofiltration BMPS. Therefore, the project's water quality management approach would effectively treat stormwater runoff prior to discharge from the site and to receiving waters. The proposed project would not result in significant alteration of receiving water quality following construction and would be consistent with the Carlsbad Management Area WQIP and the City of San Marcos JRMP. Impacts would be **less than significant**.

Threshold #7: Result in significant alteration of receiving water quality during or following construction?

As identified in response to Threshold #2, short-term, construction-related impacts resulting from siltation and erosion, the use of fuels for construction equipment, and the generation of trash and debris from the construction site would be minimized through project design features and construction-related water quality BMPs identified in the project's SWPPP. For long-term impacts, and in compliance with the BMP Design Manual, the proposed project includes a comprehensive water quality approach, including biofiltration features and source control and site design BMPs that would pre-treat storm water discharge from impervious areas to a medium pollutant removal efficiency or better, to ensure that there would not be an increase in pollutant discharge to receiving waters. Therefore, the proposed project would not result in an increase in pollutant discharges to receiving waters. Impacts would be **less than significant.**

Threshold #8: Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

As identified above, impaired water bodies in the Carlsbad Watershed, within which the project site is located, include San Marcos Creek, Batiquitos Lagoon, and the Pacific Ocean. Potential pollutants to be generated by development projects include sediment, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

The proposed project includes a comprehensive water quality management approach to ensure that there would not be an increase in pollutant discharge to receiving waters. The comprehensive use of biofiltration and source control and site design BMPs would effectively treat stormwater runoff prior to discharge from the site and to receiving waters in compliance with the requirements of the BMP Design

Manual. No flow-thru treatment BMPs are proposed to be implemented on site in lieu of retention or biofiltration. As identified above, biofiltration has a medium to high efficacy for pollutant removal. Therefore, the project would not result in an increase in pollutant discharges to receiving waters. Impacts would be **less than significant**.

Threshold #9: Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?

As identified above, impaired water bodies in the Carlsbad Watershed, within which the project site is located, include San Marcos Creek, Batiquitos Lagoon, and the Pacific Ocean. Potential pollutants to be generated by development projects include sediment, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

The proposed project includes a comprehensive water quality management approach to ensure that there would not be an increase in pollutant discharge to receiving waters. Nutrient sensitive media will be used in the biofiltration basin to provide treatment. The comprehensive use of biofiltration and source control and site design BMPs would effectively treat stormwater runoff prior to discharge from the site and to receiving waters in compliance with the requirements of the BMP Design Manual. As identified above, biofiltration has a medium to high efficacy for pollutant removal. Therefore, while the project site is tributary to already impaired water bodies as listed on the CWA Section 303(d) list, the project would not result in an increase in any pollutant for which those water bodies are already impaired. Impacts would be **less than significant**.

Threshold #10: Be tributary to environmentally sensitive areas (e.g., MSCP, RARE, Areas of Special Biological Significance, etc.)? If so, can it exacerbate already existing sensitive conditions?

As discussed in Section 3.3 Biological Resources, the project site is located within the MHCP. However, the project site is not located within a Focused Planning area as defined in the MHCP and the draft San Marcos Subarea Plan. From a water quality and hydrology perspective, conditions in environmentally sensitive areas could be exacerbated by increases in erosion, increases in pollutants, and impacts related to hydrology and flooding.

Erosion – As identified above, with the proposed development and incorporation of biofiltration and BMPs, the runoff would be reduced compared to existing conditions. The proposed biofiltration features and BMPs would also minimize the potential for erosion and siltation. Thus, through a combination of reduced runoff and adequately stabilized soils as required by provisions in the NPDES General Permit, Order R9-2013-0001 as amended and the BMP Design Manual, the proposed project would not increase erosion on or offsite and would not exacerbate already existing sensitive conditions at environmentally sensitive areas.

Pollutants/Water Quality – the proposed project includes a comprehensive water quality management approach to ensure that there would not be an increase in pollutant discharge to receiving waters. The use of biofiltration features and source control and site design BMPs would effectively treat stormwater runoff prior to discharge from the site and to receiving waters. As identified above, biofiltration has a high efficiency for removal of sediments, nutrients, trash, metals, oil/grease, organics, and oxygen demanding substances and has a medium efficiency for removal of bacteria. The biofiltration features would be subject to regular inspection and maintenance as per the preliminary SWQMP (**Appendix L**). Furthermore, the property owner would also enter into a stormwater management and discharge

control maintenance agreement for the installation and maintenance of permanent BMPs prior to issuance of permits.

Hydrology/Flooding - The proposed project has been designed such that the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site. Per the FEMA Flood Insurance Rate Map Number 06073C0789H, the project site is not located within a 100-year flood hazard area (FEMA 2012). Additionally, as identified above, the runoff would be reduced from existing conditions under post-development conditions. Therefore, the proposed project would adequately attenuate stormwater runoff during storm events and not contribute to flooding or hydrology disruptions in sensitive environments.

In conclusion, the proposed project will control erosion, pollutants, and flooding and would not exacerbate already existing sensitive conditions at environmentally sensitive areas. Impacts would be **less than significant**.

Threshold #11: Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?

To reduce potential impacts to marine, fresh, or wetland waters downstream, the proposed project includes a comprehensive water quality management approach that includes the use of biofiltration and source control and site design BMPs to effectively treat stormwater runoff prior to discharge into San Marcos Creek and Batiquitos Lagoon. Biofiltration has a high efficiency for removal of sediments, nutrients, trash, metals, oil/grease, organics, and oxygen demanding substances and a medium efficiency for removal of bacteria. The biofiltration features would be subject to regular inspection and maintenance as per the preliminary SWQMP (Appendix L). Furthermore, the property owner would also enter into a stormwater management and discharge control maintenance agreement for the installation and maintenance of permanent BMPs prior to issuance of permits. Therefore, the proposed project would not have a potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters. Impacts would be **less than significant**.

3.9.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to hydrology/water quality, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts on hydrology/water quality. All of the cumulative projects identified in Table 2-3 are considered in this cumulative analysis.

Hydrology

Development of the proposed project, along with the related projects, could incrementally increase the cumulative amount of impervious surfaces in the project area. This would potentially result in

increased surface runoff, alteration of the regional drainage pattern, and flooding. However, like the proposed project, each individual project applicant would be required to hydrologically engineer the respective project sites to ensure that post-development surface runoff flows can be accommodated by the regional drainage system. Similar to the related projects, runoff volume from the project site in the post-development condition is less than in the pre-development condition due to the implementation of a comprehensive drainage plan, including the use of biofiltration facilities and BMPs. Therefore, the proposed project's contribution to a cumulative impact from a hydrology perspective is **less than significant**.

Water Quality

Development of the proposed project, in conjunction with cumulative projects that drain to the San Marcos Hydrologic Area, has the potential to increase the concentration of pollutants in surface runoff and downstream water quality. However, all of the identified related projects would be subject to the same federal water quality standards and state waste discharge requirements as the proposed project. This includes preparation of project-specific SWPPPs per the NPDES permit program and implementation of associated BMPs to prevent construction-related runoff from polluting receiving waters. Additionally, similar to related projects, the proposed project has been designed to incorporate biofiltration and BMPs to limit the potential for water quality impacts to the greatest extent feasible. By incorporating these features into the project design, the proposed project would not substantially contribute to a significant cumulative impact to water quality. Impacts would be **less than significant**.

3.9.6 Mitigation Measures

Based upon the analysis presented in Sections 3.9.4 and 3.9.5, no impacts were identified and no mitigation measures are required.

3.9.7 Conclusion

The proposed project would increase the number of impervious surfaces at the project site; however, the project site would be hydrologically engineered such that post-development runoff would be less than in the pre-development condition. Therefore, hydrologic impacts resulting from the proposed project would be less than significant. Additionally, with incorporation of regulatory measures, such as biofiltration facilities and BMPs that would treat and eliminate the pollutants of concern prior to discharging to San Marcos Creek, as well as implementation of a project specific SWPPP, construction and operation of the proposed project would not result in substantial adverse water quality impacts and potential impacts would be less than significant.

3.10Land Use and Planning

Introduction

This section analyzes the potential for the proposed project to have impacts related to land use and planning. This section considers consistency with applicable land use plans and habitat conservation plans. The transportation portion of the analysis is based on the following report, which is included as **Appendix N** of the Environmental Impact Report (EIR)[13]:

- *Capalina Development Local Transportation Analysis (LTA)*, prepared by CR Associates (CRA) (August 2023).

Although not required under the California Environmental Quality Act (CEQA), the Local Transportation Analysis focuses on automobile delay/Level of Service (LOS), consistent with the City's *Transportation Impact Analysis Guidelines (TIAG)* (San Marcos 2020). The LOS analysis was conducted to identify roadway deficiencies in the project study area and to recommend project improvements to address such deficiencies. The Local Transportation Analysis is incorporated and addressed in this section as it relates to consistency with the City's Mobility Element policies in the General Plan. A vehicle miles traveled (VMT) analysis, which is required under CEQA, is included as Appendix M of the EIR and summarized in Section 3.15, Transportation.

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact related to physical division of an established community. Therefore, this issue is not discussed further in this EIR section. Section 5.7, Environmental Effects Found not to be Significant - Land Use, provides additional information on this topic.

Table 3.10-1 summarizes the project- and cumulative-level land use impact analysis for the proposed project.

Table 3.10-1. Land Use Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Threshold #1: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.10.1 Existing Conditions

This section describes the existing planning context for the project site, including the General Plan and Zoning designations that currently apply to the site.

[13] Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Project Site

As shown in Figure 2-1 in Chapter 2, the 2.51-acre project site is located in the City of San Marcos in northern San Diego County. Specifically, the project site is located on the north side of Capalina Road, between N. Rancho Santa Fe Road and N. Pacific Street in the Business/industrial District. The project area is developed with a mix of commercial and residential uses.

The project site is currently undeveloped, vacant land. Per the Phase I Environmental Site Assessment prepared for the project (Appendix J), the project site appeared to be vacant pasture land from prior to 1939 until approximately 1974, when the northwestern perimeter of the property appeared to be vacant, rough-graded land. By 1980, the project site appeared to be vacant, rough-graded land with what appeared to be an area graded for uses as a vehicle parking area on the southeastern portion of the property. By 1996, the property appeared to be vacant, weed-abated land. By 2005, a vehicle parking area appears to be to be located on the southeastern perimeter of the subject property. By 2012, the vehicle parking area was removed, and the property appeared to be vacant, weed-abated land (The Phase 1 Group 2022). The entire site is occupied with disturbed habitat with a few ornamental trees (Dudek 2023a).

Existing General Plan Designation

The project site has an existing General Plan Land Use designation of Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a minimum floor area ratio (FAR) of 1.0 and a maximum FAR of 1.50. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation "Provides for a variety of commercial and office uses integrated as a cohesive development. These uses may be mixed 'vertically' (on separate floors of a building) or 'horizontally' (on a single site or adjacent parcels). Structured parking, while not required to achieve the maximum FAR, may be allowed in the MU3 designation. Shared parking arrangements may also be allowed consistent with the nature of mixed uses. Typical uses include retail, commercial services, administrative and office uses, institutional and government uses, business support and financial uses, restaurants, and health care facilities. To maintain a pedestrian scale and orientation, retail and other active services are encouraged at street level. This designation does not allow residential uses. A Specific Plan is required for development" (City of San Marcos 2012).

Existing Zoning Designation

The project site has a zoning designation of MU-3 (SP). According to Section 20.225.060 of the City's Zoning Ordinance, this zone is intended to "support a job-based mixed use area combining a variety of commercial and office uses integrated as a cohesive development. This business-oriented area shall be complementary to the MU-1 and MU-2 Zones; residential uses are not permitted in the MU-3 (SP) Zone. Typical uses include commercial retail, business services, administrative and office uses, institutional and government uses, business support and financial uses, restaurants, and health care facilities. Horizontal and vertical mixed use is permitted" (City of San Marcos 2021).

Surrounding Land Uses

To the east of the project site is the Crossroad Shopping retail center with various strip commercial establishments such as restaurants and salon services (MU-3 zone). To the south on the opposite side of Capalina Road is a church (B-P zone) and the El Dorado mobile home community (R-MHP zone). To the west is an adjacent parcel (APN 219-115-35) which is zoned MU-3, containing various existing strip commercial establishments, abandoned/demolished commercial buildings, and parking areas.

This 3.61-acre parcel is subject to a San Diego County Water Authority (SDCWA) easement, and additionally a 1987 reciprocal easement agreement which grants the project parcel an express easement for ingress, egress, and parking across the entirety of APN 219-115-35. The project applicant is proposing to accommodate all parking onsite and does not anticipate using this area, under the terms of the reciprocal easement agreement, as part of the project. To the north of the project site is W. Mission Road, the SPRINTER rail line, and the Inland Rail Trail. North of that is an undeveloped area zoned MU-1 and then single family residential uses (R-1-7.5 zone).

Roadway Circulation System

The study area includes ten intersections and nine roadway segments based on guidance provided in the TIAG (San Marcos 2020). Per the City's TIAG, the study area was defined using the following criteria:

- Signalized and unsignalized intersection along and adjacent to the project site;
- Site access driveways; and
- Any classified (non-residential) roadway segments that are linked to the intersections that are being studied

Figure 3.10-1 shows the project study area roadway segments and intersections.

Study Intersections

- #1 - N. Rancho Santa Fe Road & W. Mission Road (Signal)
- #2 - N. Pacific Street (west) & W. Mission Road (Signal)
- #3 - N. Pacific Street (east) & W. Mission Road (Signal)
- #4 - N. Rancho Santa Fe Road & Capalina Road (Signal)
- #5 - N. Pacific Street & Capalina Road (Side-Street Stop-Controlled)
- #6 - N. Rancho Santa Fe Road & SR-78 Westbound Ramps (Signal)
- #7 - N. Rancho Santa Fe Road & SR-78 Eastbound Ramps (Signal)
- #8 - N. Las Posas Road & Descanso Avenue (Signal)
- #9 - Project Driveway #1 & Capalina Road (Side-Street Stop-Controlled)
- #10 - Project Driveway #2 & Capalina Road (Side-Street Stop-Controlled)

Study Roadway Segments

- N. Rancho Santa Fe Road, between W. Mission Road and Capalina Road
- N. Rancho Santa Fe Road, between Capalina Road and SR-78 Westbound Ramps
- N. Rancho Santa Fe Road, between SR-78 Westbound and SR-78 Eastbound Ramps
- N. Rancho Santa Fe Road, between SR-78 Eastbound Ramps and Descanso Avenue
- N. Pacific Street, between W. Mission Road and Capalina Road
- N. Pacific Street, between Capalina Road and Descanso Avenue
- W. Mission Road, between N. Rancho Santa Fe Road and N. Pacific Street
- Capalina Road, between N. Rancho Santa Fe Road and N. Pacific Street
- Descanso Avenue, between N. Pacific Street and N. Las Posas Road

Existing Level of Service for Intersections and Roadway Segments

Table 3.10-2 summarizes the LOS criteria for signalized intersections and **Table 3.10-3** summarizes the LOS criteria for stop-controlled unsignalized intersections. **Table 3.10-4** summarizes roadway segments daily capacity and LOS standards. Section 3.10.4 below provides additional information regarding the LOS analysis and methodology.

Table 3.10-2. Signalized Intersection LOS Operational Analysis Method

LOS	Average Stopped Delay Per Vehicle (Seconds)	Description
A	≤10	Operations with very low delay. This occurs when the progression is extremely favorable and most vehicles do not stop. Short cycle lengths may also contribute to low delay.
B	>10 and ≤20	Operations with generally good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	>20 and ≤35	Operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	>35 and ≤55	Operations with high delay, resulting in some combination of unfavorable progression, long cycle lengths, or high volumes. The influence of congestion, and individual cycle features is noticeable.
E	>55 and ≤80	The limit of acceptable delay. Individual cycle failures are frequent occurrences.
F	>80	Excessively high delays considered unacceptable to most drivers. Poor progression and long cycle lengths may also be major contributing factors to such delays.

Source: Highway Capacity Manual, 7th edition.

Table 3.10-3. LOS Criteria for Stop-Controlled Unsignalized Intersections

Average Stopped Delay Per Vehicle (Seconds)	LOS
≤10	A
>10 and ≤20	B
>20 and ≤35	C
>35 and ≤55	D
>55 and ≤80	E
>80	F

Source: Highway Capacity Manual, 6thth edition.

Table 3.10-4. Roadway Segment Daily Capacity and LOS Standards

Street Classification	LOS/ADT Threshold				
	A	B	C	D	E
Expressway (6-lane)	< 30,000	< 42,000	< 60,000	< 70,000	< 80,000
Prime Arterial (6-lane)	< 25,000	< 35,000	< 50,000	< 55,000	< 60,000
Major Arterial (6-lane, divided)	< 20,000	< 28,000	< 40,000	< 45,000	< 50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	< 30,000	< 35,000	< 40,000
Major Arterial (3-lane, one-way)	< 12,500	< 16,500	< 22,500	< 25,000	< 27,500
Major Arterial (2-lane, one-way)	< 10,000	< 13,000	< 17,500	< 20,000	< 22,500
Secondary Arterial / Collector (4-lane w/ center lane)	< 10,000	< 14,000	< 20,000	< 15,000	< 30,000
Collector (4-lane w/o center lane)	< 5,000	< 7,000	< 10,000	<13,000	< 15,000
Collector (2-lane w/ continuous left-turn lane)	< 5,000	< 7,000	< 10,000	< 13,000	< 15,000
Collector (2-lane no fronting property)	< 4,000	< 5,500	< 7,500	< 9,000	< 10,000
Collector (2-lane w/ commercial fronting)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (2-lane w/ multi-family)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (3-lane, one-way)	< 11,000	< 14,000	< 19,000	< 22,500	< 26,000
Collector (2-lane, one-way)	< 7,500	< 9,500	< 12,500	< 15,000	< 17,500
Collector (1-lane, one-way)	< 2,500	< 3,500	< 5,000	< 6,500	< 7,500
Sub-Collector (2-lane single family)	-	-	< 2,200	-	-

Source: City of San Marcos Transportation Impact Guidelines (San Marcos 2020).
Note: Bold number indicates the ADT threshold for acceptable LOS.

Traffic Counts

The study area intersections and roadway traffic counts were conducted on September 27, 2022 and March 9, 2023, by Counts Unlimited, Inc. Traffic count worksheets are provided in Appendix C of the LTA which is included as Appendix N of this EIR.

Intersections

Table 3.10-5 displays intersection LOS and average vehicle delay results for the key study area intersections under existing conditions. As shown in Table 3.10-5, all intersections are calculated to currently operate at LOS D or better during both the AM and PM peak hours.

Table 3.10-5. Peak Hour Intersection LOS – Existing Conditions

#	Intersection	Control Type	Peak Hour	Existing	
				Avg. Delay (seconds)	LOS(2)
1	N. Rancho Santa Fe / W. Mission Road	Signal	AM	12.8	B
			PM	13.8	B
2	N. Pacific Street (West) / W. Mission Road	Signal(1)	AM	7.0	A
			PM	7.9	A
3	N. Pacific Street (East) / W. Mission Road	Signal(1)	AM	11.1	B
			PM	8.6	A
4	N. Rancho Santa Fe / Capalina Road	Signal	AM	25.7	C
			PM	41.6	D
5	N. Pacific Street / Capalina Road	SSSC(2)	AM	10.9	B
			PM	12.0	B
6	N. Rancho Santa Fe / SR-78 Westbound Ramps	Signal	AM	44.4	D
			PM	33.8	C
7	N. Rancho Santa Fe / SR-78 Eastbound Ramps	Signal	AM	22.7	C
			PM	21.4	C
8	Las Posas Road / Descanso Avenue	Signal	AM	21.4	C
			PM	21.1	C

Source: CRA 2023a.
Notes: (1) Intersections function as a single intersection with one controller.
(2) SSSC – Side-Street Stop Controlled. For SSSC intersections, the delay is shown as the worst delay experience by any of the movements.

Roadway Segments

Table 3.10-6 shows the classification of each project area roadway and the current operating conditions for the study area roadway segment. As shown in Table 3.10-6, the study area segments are calculated to currently operate at an acceptable LOS with the exception of the following roadway segment:

- N. Rancho Santa Fe Road, between SR-78 Eastbound Ramps and Descanso Avenue (LOS E)

Table 3.10-6. Roadway Segment LOS Results – Existing Conditions

Roadway	Segment	Classification	Daily Volume	LOS Threshold (LOS E)	V/C(1)	LOS(1
N. Rancho Santa Fe Road	W. Mission Road to Capalina Road	4-Lane Major Arterial	13,297	40,000	0.332	A
	Capalina Road to SR-78 Westbound Ramps	4-Lane Major Arterial	18,803	40,000	0.470	B
	SR-78 Westbound Ramps to SR-78 Eastbound Ramps	4-Lane Major Arterial	26,785	40,000	0.670	C
	SR-78 Eastbound Ramps to Descanso Avenue	4-Lane Major Arterial	35,911	40,000	0.898	E
N. Pacific Street	W. Mission Road to Capalina Road	2-Lane Collector (commercial fronting)	1,219	8,000	0.152	A
	Capalina Road to Descanso Avenue	2-Lane Collector with CTLT	2,837	15,000	0.189	A
W. Mission Road	N. Rancho Santa Fe Road to N. Pacific Street	4-Lane Major Arterial	16,378	40,000	0.409	B
Capalina Road	N. Rancho Santa Fe Road to N. Pacific Street	2-Lane Collector with CTLT	4,262	15,000	0.284	A
Descanso Avenue	N. Pacific Street to N. Las Posas Road	2-Lane Collector with CTLT	3.626	15,000	0.242	A

Source: CRA 2023a.
Notes: (1) VC = Volume/Capacity
(2) LOS = Level of Service
(3) CLTL = Continuous Left-Turn Lane

3.10.2 Regulatory Setting

This section provides an overview of the regulatory setting related to planning and land use that apply to the project, including state, regional, and local regulation and planning documents.

State

California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is provided in the California Planning and Zoning Law, Government Code Sections 65000 et seq. Under state planning law, each city and county is required to adopt a General Plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning" (Section 65300). The California Supreme Court has called the General Plan the "constitution for future development." The General Plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private. A General Plan consists of several elements, including land use, circulation, housing, conservation, open

space, noise, and safety; other elements may be included at the discretion of the jurisdiction that relate to the physical development of the county or city.

Senate Bill 743

California Senate Bill (SB) 743 mandated specific types of CEQA analysis of transportation projects effective July 1, 2020. Prior to implementation of SB 743, CEQA transportation analyses of individual projects typically determined impacts on the circulation system in terms of LOS roadway delay and/or capacity usage at specific locations, such as street intersections or roadway segments. SB 743, signed into law in September 2013, required changes to the guidelines for CEQA transportation analysis. The changes include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. The purpose of SB 743 is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

Under SB 743, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS and other similar vehicle delay or capacity metrics may no longer serve as transportation impact metrics for CEQA analysis. The California Office of Planning and Research (OPR) has updated the CEQA Guidelines and provided a final technical advisory in December 2018, which recommends VMT as the most appropriate measure of transportation impacts under CEQA. The California Natural Resources Agency certified and adopted the CEQA Guidelines including the Guidelines section implementing SB 743. The changes have been approved by the Office of Administrative Law and are now in effect. Section 3.15, Transportation, of this EIR analyzes potential VMT impacts related to the proposed project.

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process. Cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City can continue to require congestion-related transportation analysis and mitigation projects through planning approval processes outside of CEQA.

To comply with the requirements of SB 743, the City of San Marcos has prepared its TIAG to provide guidance on conducting transportation impact analyses in the city as follows:

- CEQA Analysis Requirements: Requirements for conducting CEQA analysis, which consists of SB 743-consistent VMT analysis as well as assessing impacts to pedestrians, bicyclists, transit, hazards, emergency access, and other impacts (See Section 3.15 Transportation).
- Local Transportation Analysis Requirements: Requirements for conducting LOS analysis, site access assessments, and other local transportation analyses for non-CEQA purposes (Section 3.10 Land Use and Planning).

Regional/Local

SANDAG San Diego Forward: The Regional Plan

The Regional Comprehensive Plan (RCP), adopted in 2021 by the San Diego Association of Governments (SANDAG), 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 is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

The Regional Plan combines the Regional Comprehensive Plan and the Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS). By integrating land use and transportation plans, the Regional Plan is intended to achieve greenhouse gas emission reduction targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities Act.

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

The Regional Plan also supports other regional transportation planning and programming efforts, including overseeing which projects are funded under the Regional Transportation Improvement Program and the TransNet program. SANDAG is applying data-driven strategies, innovative technologies, and stakeholder input to create a future system that is faster, fairer, and cleaner. Part of this data-driven approach includes the implementation of five key transportation strategies referred to as the 5 Big Moves. These strategies provide the framework for the Regional Plan and consider policies and programs, changes in land use and infrastructure, take advantage of the existing transportation highway and transit networks, and leverage trends in technology to optimize use of the transportation system. Together, these initiatives will create a fully integrated, world-class transportation system that offers efficient and equitable transportation choices, meets state climate targets, and supports local jurisdictions' achievements of Climate Action Plan goals.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. In developing the amendment, SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's greenhouse gas emissions target set by CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. The draft amendment will be released for public review and comment in June 2023.

SANDAG Smart Growth Opportunity Areas

The project site is located within the SM-7 Mixed Use Transit Corridor as identified in the SANDAG Smart Growth Concept Map for North County. The "Smart Growth Concept Map" identifies locations in the region that can support smart growth, transit, walking, and biking. The map serves as the foundation for prioritizing transportation investments and determining eligibility for local smart growth incentive funds. The Smart Growth Concept Area data includes just over 200 existing, planned, or potential smart growth locations. Planning professionals from the region's jurisdictions — each of the

18 cities and the county — provided the recommendations for these specific locations. In addition to input from the cities and county, feedback from the public was also important in creating the data for inclusion in the Smart Growth Concept Map. The SANDAG Board of Directors accepted the initial Concept Map in 2006. The Board accepted the most recent technical update in 2016 (SANDAG 2016).

Multiple Habitat Conservation Program

The Multiple Habitat Conservation Program (MHCP) is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County. The MHCP encompasses the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46%) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species.

The City of San Marcos began preparing a draft of the City Subarea Plan of the MHCP in December 1999 and although the Subarea Plan has not yet been approved by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), the plan is a component of the adopted MHCP and is currently being used as a guide for open space design and preservation within the city. The intent of the City's Draft Subarea Plan is to identify a citywide preserve system that meets local and regional biological goals while minimizing fiscal and economic impacts to the City and adverse impacts on private property owners. To help achieve this goal, certain areas, known as Focused Planning Areas (FPA), have been designated with parcel-level preserve goals which would contribute to achieving local and regional conservation goals while minimizing adverse effects on property rights and property values. The project site is not located within an FPA.

San Diego County Regional Airport Authority/Airport Land Use Commission

The nearest public airport is the McClellan-Palomar Airport, which is located approximately five miles southwest of the project site. The McClellan-Palomar Airport Land Use Compatibility Plan (ALUCP) contains policies to promote land use compatibility between the McClellan-Palomar Airport and adjacent and proximate land uses, to the extent these areas are not already developed with existing uses, and to protect the public health, safety, and welfare. Using airport-related forecasts and background data approved by the California Department of Transportation, Division of Aeronautics, the plan reflects anticipated growth of the airport over a 20-year horizon. The plan includes land use compatibility criteria and identifies policies applicable to the airport and surrounding land uses.

According to the McClellan-Palomar ALUCP, the project site partially lies within Review Area 2 of the airport influence area. The influence area is regulated by the Airport Land Use Commission (ALUC), which regulates land uses in the area to be compatible with airport-related noise, safety, airspace protection, and over-flight factors through review of development proposals within the airport influence area. Review Area 2 consists of limits on heights of structures in areas of high terrain. Residential development in Review Area 2 may be subject to annoyances commonly associated with proximity to airports, such as noise, vibration, and overflights.

City of San Marcos General Plan

The San Marcos General Plan consists of the following elements:

- *Land Use and Community Design Element* - Describes the desired future physical composition of the planning area in terms of location, type, and intensity of new development and open

space to ensure balanced development that maximizes the long-term livability of the San Marcos community.

- *Mobility Element* - Describes the mobility strategy for the City, which identifies a network of options including streets, sidewalks, trails, and transit, that connects people with the City.
- *Conservation and Open Space Element* – Recognizes the habitat and scenic value of natural and cultural open spaces within the City and lists goals and policies that ensure long-term stewardship of these resources. This element also addresses climate change, water conservation, energy conservation, air quality, watersheds, and water quality.
- *Parks, Recreation and Community Health Element* – Identifies the recreational amenities and community service programs offered within the City and outlines goals for increased access to parks, trails, recreational facilities, and community service programs for all community members.
- *Safety Element* - Establishes policies and programs to protect public health, safety, and welfare of all residents and property. This element identifies and describes plans for response to natural and human-caused safety issues, including geologic, seismic, flood, and fire hazards.
- *Noise Element* - Identifies problematic noise sources within the City and outlines strategies to reduce overall ambient noise levels. This element also includes measures to strategically distribute land uses throughout the City.
- *Housing Element* - Describes the strategy for developing a variety of housing opportunities to accommodate all residents and preserve the quality of existing housing in order to promote safe, decent, and affordable housing within the 2021-2029 planning period.
- *Environmental Justice*- Addresses priorities related to a more equitable, safe, and healthy lifestyle for all City residents.

The City's Land Use and Community Design Element identifies five goals and associated policies to guide well-balanced land use planning in the city. The following goals and policies from the City of San Marcos General Plan, Land Use Element pertain to planning:

- Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.
    - Policy LU-1.1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.
    - Policy LU-1.3: Diversify land uses by providing mixed use land uses in strategic locations within the City that place housing adjacent to employment.
    - Policy LU-1.4: Maintain the natural integrity of open space preserves by ensuring development projects are sensitively integrated along the edges of preserved or protected areas.
- Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.
    - Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.

  - Policy LU-2.2: Encourage new development to be sited to respond to climatic conditions, such as solar orientation, wind, and shading patterns.
  - Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.
  - Policy LU-2.5: Promote landscaping (e.g., native, drought-tolerant plants) that minimizes demands on water supply.
  - Policy LU-2.7: Promote the installation of trees to reduce the urban heat island effect and green infrastructure to reduce storm water runoff.
- Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.
  - Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.
  - Policy LU-3.5: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.
  - Goal LU-5: Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.
  - Policy LU-5.4: Require building and site design that respects the natural topography and iconic ridgelines that serve as the visual backdrop for San Marcos.
  - Policy LU-5.6: Require a specific plan for strategic areas/properties that require high-quality design, orientation, and development due to their location or visibility within the community.
  - Policy LU-5.7: Architecture shall be enhanced with high-end building materials, varied roof lines, and decorative details.
- Goal LU-7: Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.
  - Policy LU-7.2: Coordinate pedestrian, transit and infrastructure upgrades with infill and redevelopment opportunities.

The Mobility Element of the General Plan identifies specific goals and policies related to an efficient circulation system, traffic calming and safety, and alternative modes of travel. Those that are applicable to the land use for the proposed project are identified below. Policies associated with Goals M-2 and M-3 are analyzed in **Table 3.10-7**, located at the end of this section, and discussed in Section 3.15, Transportation.

- Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.

- Policy M-1.1: Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map
- Policy M-1.2: Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.
- Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City.
- Policy M-1.4: Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element:
  - LOS D or better for Vehicles as a prioritized mode
    - Generally, provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).
  - The City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).
- Policy M-1.6: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.
- Policy M-1.7: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.

- Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.
  - Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods, while maintaining the City's desire to provide connectivity on the roadway network.
  - Policy M-2.3: Consider roundabouts, as appropriate, as an intersection control device with demonstrated air quality, traffic efficiency, and safety benefits.
- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.
  - Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.
  - Policy M-3.2: Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.

- Policy M-3.3: Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.
- Policy M-3.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.
- Policy M-3.9: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.

The General Plan includes goals and policies applicable to other areas, such as mobility, safety, noise, conservation, and environmental justice. The project's consistency with applicable General Plan goals and policies is presented in **Table 3.10-7**, at the end of this section.

San Marcos Municipal Code and Zoning Ordinance, Title 20

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The Zoning Ordinance is based on the official Zoning Map of the City of San Marcos. The purpose of this Zoning Ordinance is to protect and promote the public health, safety, comfort, convenience, and general welfare of the San Marcos community; to implement the policies of the General Plan; and to provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources.

The project site has a zoning designation of MU-3. According to Section 20.225.060 of the City's Zoning Ordinance, this zone is intended to "support a job-based mixed-use area combining a variety of commercial and office uses integrated as a cohesive development. This business-oriented area shall be complementary to the MU-1 and MU-2 Zones; residential uses are not permitted in the MU-3 (SP) Zone. Typical uses include commercial retail, business services, administrative and office uses, institutional and government uses, business support and financial uses, restaurants, and health care facilities. Horizontal and vertical mixed use is permitted" (San Marcos 2021).

3.10.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to land use if it would:

- Threshold #1: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

As identified above, impacts related to physical division of an established community are not discussed in this section. Section 5.0, Environmental Effects Found not to be Significant, provides additional information on this topic.

3.10.4 Project Impact Analysis

The project proposes 119 residential apartments on 2.51 gross acres for a proposed density of 47 dwelling units/acre. Six of the units would be affordable at the very low-income level. Very-low income

is defined by the U.S Department of Housing and Urban development as 50% of the Area Median Income or AMI)[14]. The proposed project is requesting approval of a General Plan Amendment (GPA22-0003), Rezone (R20-0003), and a Site Development Plan (SDP22-0007), as further detailed below:

- **General Plan Amendment (GPA22-0003)** – A General Plan Amendment would be required to change the existing Mixed Use 3 (MU3) designation to Mixed Use 2 (MU2).
- **Rezone (R22-0003)** - A rezone would be required to change the existing Mixed Use 3 (SP) (MU-3-SP)) zoning to Mixed Use 2 (MU-2).
- **Site Development Plan (SDP22-0007)** - The Site Development Plan approval would be required to construct 119 multi-family residential units and 4,000 square feet (s.f.) of commercial and address the details of the architectural style, building elevation, fencing, landscaping, among other criteria, within the development.

The project applicant would utilize the State Density Bonus Program and 5% of the units would be affordable housing units, as defined under the State Density Bonus Law, California Government Code (Section 65915 – 65918) as enacted by California Assembly Bill No. 2345 (State Density Bonus). The Density Bonus Law allows for parking reductions and, in addition, the allowance of "incentives" or "concessions" from the local jurisdiction to assist with the construction and economic viability of the project.

Chapter 20.305 of the City's Zoning Ordinance addresses the Density Bonus law and states that it is the intent of the City to encourage and facilitate development of affordable housing and to implement the goals, objectives, and policies of the City's Housing Element.

The proposed project would rely mainly on the State Density Bonus law parking ratios for residential parking. However, the proposed project would use an incentive, as provided by the State Density Bonus law, in order to adjust the proposed residential parking from 147 spaces to 142 spaces and adjust the proposed commercial parking from 12 space to 5 spaces. The proposed project is also requesting waivers for development standards relating to minimum FAR and setbacks. Electric vehicle (EV) parking is incorporated in the project parking and includes 8 spaces with Level 2 EV chargers, 15 EV capable spaces and 36 EV ready spaces.

The proposed project would abandon/vacate a City slope easement per recorded document 2004-0229021. This easement is located in the northwestern corner of the project site.

Threshold #1: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

Plans and policies considered in this analysis include the San Marcos General Plan, the City of San Marcos zoning ordinance and the MHCP.

San Marcos General Plan

As identified above, the project site has an existing General Plan Land Use designation of Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a minimum FAR of 1.0 and a maximum FAR of 1.50. If approved as currently proposed, the project would be consistent with the General Plan as the proposed project includes a GPA. Specifically, the requested GPA would amend the project site's

[14] Area Median Income (AMI) is the midpoint of a region's income distribution- half of the families in a region earn more than the median and half earn less than the median. This can also be looked at as the median household income.

designation in the Land Use and Community Design Element to Mixed Use 2 (MU2). The requested GPA would allow for development of the project up to 119 residential apartments, 4,000 s.f. of commercial use, common and private open space in an urbanized area of the City.

Table 3.10-7 at the end of this section summarizes the applicable San Marcos General Plan goals and policies relating to land use. As shown in Table 3.10-7, the project is consistent with the applicable goals and policies.

Mobility Element Consistency – Level of Service Analysis

The following analysis focuses on automobile delay/LOS, consistent with the City's TIAG. The LOS analysis was conducted to identify roadway deficiencies in the project study area and to recommend project improvements to address such deficiencies. The LTA is incorporated and addressed in this section as it relates to consistency with the City's Mobility Element policies . A VMT analysis, which is required under CEQA, is included as Appendix M of the EIR and summarized in Section 3.15, Transportation.

Analysis Methodology - Intersections

The AM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 7:00 AM and 9:00 AM. The PM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 4:00 PM and 6:00 PM. Tables 3.10-2 and 3.10-3 summarize the LOS criteria for signalized intersections and unsignalized stop-controlled intersections.

The analysis of signalized intersections utilized the operational analysis procedure as outlined in the Highway Capacity Manual (HCM) 6th Edition signalized (Chapter 19) intersection analysis methodology. This method defines LOS in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time. This technique uses 1,900 vehicles per hour per lane (VPHPL) as the maximum saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for the analysis of signalized intersections are described in Table 3.10-2, identifying the thresholds of control delays and the associated LOS. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

Unsignalized intersections were analyzed using the Highway Capacity 6th Edition side-street stop (Chapter 20) and all-way stop (Chapter 21) intersection analysis methodology. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

LOS was determined as follows:

- All-way stop intersections: Reported for the entire intersection as an average value.
- Side-street stop intersections: Reported for the worst-case movement.

The LOS criteria used for the analysis of unsignalized intersections are described in Table 3.10-3.

Analysis Methodology – Roadway Segments

Roadway segment LOS standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes. Table 3.10-4 presents the roadway segment capacity standards found in the City's TIAG. The actual capacity of a roadway facility varies according to its physical attributes.

Level of Service Standards

The City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards outlined in the General Plan Mobility Element. If the addition of the traffic generated from a proposed project results in any one of the following, improvements should be identified to increase performance to acceptable or pre-project conditions under each scenario:

- Triggers an intersection operating at acceptable LOS to operate at unacceptable LOS (LOS E or F) and increases the delay by more than 2.0 seconds.
- Increases the delay for a study intersection that is already operating at unacceptable LOS (LOS E or F) by more than 2.0 seconds.
- Triggers a roadway segment operating at acceptable LOS (LOS A, B, C, D) to operate at unacceptable LOS and increases the volume/capacity (V/C) ratio by more than 0.02.
- Increases the V/C ratio for a study roadway segment that is already operating at unacceptable LOS (LOS E or F) by more than 0.02.

Project Trip Generation

To determine the traffic generation of the proposed project, the April 2002 *SANDAG Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG 2002) rates were applied to the proposed project. The "Multi-family Residential" (more than 20 DU/acre)" trip rate was used to estimate the project residential trip generation. The "Specialty Retail/Strip Commercial" trip rate was used to estimate the commercial trip generation.

Table 3.10-8 presents the trip generation rates and forecasted project-generated trips for weekday conditions. As shown in Table 3.10-8, the project would generate approximately 874 average daily trips (ADTs), including 63 AM peak hour trips and 80 PM peak hour trips. The project trip distribution was manually developed based on the geographical location of the project, as well as the characteristics of the proposed and surrounding land uses. Additional considerations were taken for North Pacific Street and W. Mission Road, which allows for only right-in/right-out movements for the south leg.

Construction Trip Generation

Grading of the project site would consist of approximately 4,030 cubic yards (cy) of cut material and 12,270 cy of fill material requiring an import of approximately 8,240 cy of material. Assuming 20 work days for materials import and the use of a 15 cy truck, there would be approximately 28 truckloads per day. The grading phase of the project is not expected to generate trips above the trips associated with the 119-unit multi-family residential development and proposed commercial uses. Therefore, the grading phase would not result in any traffic related significant impacts or substantial effects above those associated with the project. No traffic related impacts are identified during construction.

Table 3.10-8. Project Trip Generation

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
				% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
		Rate	ADT			In	Out	Total			In	Out	Total
Multi-Family Residential (more than 20 du/acre)	119 DU	6/DU	714	8%	20:80	12	46	58	9%	70:30	46	19	65
Specialty Retail/Strip Commercial	4,000 SF	40/KSF	160	3%	60:40	3	2	5	9%	50:50	8	7	15
Total			874			15	48	63	10%	70:30	54	26	80

Source: CRA 2023a.
Note: Trip generation rates were obtained from the (Not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002 by SANDAG
DU = Dwelling Unit, ADT = Average Daily Traffic

Local Transportation Analysis of Near-Term (Year 2025) Conditions

The following section presents the analysis of study area intersections and street segments under Near-Term Year 2025 Base conditions and Near-Term Year 2025 Base + Project conditions.

Cumulative Project Traffic

Twelve projects were identified as cumulative projects for the Near Term Year 2025 Condition. These projects are detailed in Section 5.1 of the LTA (CRA 2023a). Combined, the cumulative projects total 12,194 ADT with 972 AM Peak Hour trips (279 in/693 out) and 1,134 PM Peak Hour trips (764 in/370 out).

Study area roadway and intersection geometrics under Near-Term Base conditions were assumed to be identical to the existing roadway geometrics. The Near-Term Base scenario traffic volumes were derived by adding the additional trips generated by the cumulative projects to the existing traffic volumes.

Near-Term Year 2025 Intersection Analysis

Table 3.10-9 summarizes the intersection operations through the study area for the Near-Term Year 2025 Base Condition and Base + Project conditions.

As shown in Table 3.10-9, in the Near-Term Year 2025 Base condition, all intersections are calculated to operate acceptably at LOS D or better during both the AM and PM peak hours. With the addition of project traffic (Base + Project condition) all intersections would continue to operate acceptably at LOS D. None of the study intersections would degrade to an unacceptable level with implementation of the proposed project and no improvements would be required.

Table 3.10-9. Near-Term Year 2025 - Intersection Operations Without and With Project

#	Intersection	Control Type	Peak Hour	Year 2025 Base Conditions		Year 2025 Base + Project Conditions		Δ[3]	Consistent with City LOS Standards?[4]
				Avg. Delay (sec.)[1]	LOS[2]	Avg. Delay (sec.)[1]	LOS[2]		
1	N. Rancho Santa Fe / W. Mission Road	Signal	AM	12.9	B	12.9	B	0.0	Yes
			PM	14.2	B	14.6	B	0.4	Yes
2	N. Pacific Street (west) / W. Mission Road	Signal	AM	7.4	A	7.8	A	0.4	Yes
			PM	8.0	A	8.1	A	0.1	Yes
3	N. Pacific Street (east) / W. Mission Road	Signal	AM	11.3	B	11.0	B	-0.3	Yes
			PM	8.7	A	8.8	A	0.1	Yes
4	N. Rancho Santa Fe Road / Capalina Road	Signal	AM	25.7	C	29.0	C	3.3	Yes
			PM	42.3	D	49.5	D	7.2	Yes
5	N. Pacific Street / Capalina Road	SSSC[5]	AM	10.9	B	10.9	B	0.0	Yes
			PM	12.0	B	12.1	B	0.1	Yes
6	N. Rancho Santa Fe Road / SR-78 Westbound Ramps	Signal	AM	45.3	D	45.2	D	-0.1	Yes
			PM	33.7	C	33.7	C	0.0	Yes
7	N. Rancho Santa Fe Road / SR-78 Eastbound Ramps	Signal	AM	22.8	C	23.1	C	0.3	Yes
			PM	21.7	C	22.1	C	0.4	Yes
8	N. Las Posas Road / Descanso Avenue	Signal	AM	22.6	C	22.6	C	0.0	Yes
			PM	22.7	C	22.7	C	0.0	Yes
9	Project Driveway #1 / Capalina Road	SSSC[5]	AM	DNE[6]	DNE[6]	9.5	A	9.5	Yes
			PM	DNE[6]	DNE[6]	9.9	A	9.9	Yes
10	Project Driveway #2 / Capalina Road	SSSC[5]	AM	DNE[6]	DNE[6]	9.4	A	9.4	Yes
			PM	DNE[6]	DNE[6]	9.8	A	9.8	Yes

Source: CRA 2023a.

Notes: (1) Average Delay expressed in seconds per vehicle
(2) LOS = Level of Service
(3) Δ denotes the increase in delay due to project
(4) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.
(5) SSSC = Side Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experience by any of the movements.
(6) Intersection does not exist under Year 2025 Base condition

Near-Term (Year 2025) Segment Analysis

Table 3.10-10 summarizes the segment operations throughout the study area for the Near-Term Year 2025 Base and Near-Term Year 2025 Base + Project conditions. As shown in Table 3.10-10, all of the study area segments are calculated to operate acceptably at LOS C without the project with the exception of the following roadway segment:

- N. Rancho Santa Fe Road, between SR-78 Eastbound Ramps and Descanso Avenue (LOS E).

With the addition of project traffic, all of the study area segments would continue to operate at LOS C or better with the exception of N. Rancho Santa Fe Road between SR-78 Eastbound and Descanso Avenue, which would continue to operate at LOS E. As shown in Table 3.10-10, the trips associated with the proposed project would increase the volume/capacity ratio by 0.003, which does not surpass the 0.02 threshold for roadway segments operating at LOS E or F. Therefore, this study roadway segment would not require improvements as a result of the proposed project.

Table 3.10-10. Near-Term Year 2025 Roadway Segment Operations Without and With Project

Roadway	Segment	Capacity (LOS E)[1]	Year 2025 Base Condition			Year 2025 Base + Project Condition			Δ[4]	Consistent with City LOS Standards? [5]
			Daily Volume	V/C[2]	LOS[3]	Daily Volume	V/C[2]	LOS[3]		
N. Rancho Santa Fe Road	W. Mission Road to Capalina	40,000	13,900	0.348	A	14,159	0.354	A	0.006	Yes
	Capalina Road to SR-78 Westbound Ramps	40,000	19,420	0.486	B	19,850	0.496	B	0.010	Yes
	SR-78 WB Ramps to SR-78 EB Ramps	40,000	27,400	0.685	C	27,674	0.692	C	0.007	Yes
	SR-78 EB Ramps to Descanso Avenue	40,000	36,530	0.931	E	36,650	0.916	E	0.003	Yes
N. Pacific Street	W. Mission Road to Capalina Road	8,000	1,220	0.153	A	1,399	0.175	A	0.022	Yes
N. Pacific Street	Capalina Road to Descanso Avenue	15,000	2,840	0.189	A	2,848	0.190	A	0.001	Yes
W. Mission Road	N. Rancho Santa Fe Road to N.	40,000	17,460	0.437	B	17,639	0.441	B	0.004	Yes

Roadway	Segment	Capacity (LOS E)(1)	Year 2025 Base Condition			Year 2025 Base + Project Condition			Δ(4)	Consistent with City LOS Standards? (5)
			Daily Volume	V/C(2)	LOS(3)	Daily Volume	V/C(2)	LOS(3)		
	Pacific Street									
Capalina Road	N. Rancho Santa Fe Road to N. Pacific Street	15,000	4,270	0.285	A	5,144	0.343	A	0.058	Yes
Descanso Avenue	N. Pacific Street to N. Las Posas Road	15,000	3,630	0.242	A	3,638	0.243	A	0.001	Yes

Source: CRA 2023a.

Notes: (1) Capacities based on City of San Marcos's Roadway Classification Table
(2) Volume to Capacity
(3) LOS = Level of Service
(4) Δ denotes a project-induced increase in the Volume to Capacity (V/C) ratio.
(5) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.

Local Transportation Analysis of Horizon Year 2050 Conditions

Year 2050 Network Conditions

Study area roadway and intersection geometrics under Horizon Year 2050 Conditions were assumed to be identical to the Existing Conditions.

Horizon Year 2050 ADT forecasts were obtained from the SANDAG Series 14 ABM2+/2021 RP forecast year 2050 model (scenario ID#459). Any study roadway with Near-Term Year 2025 Base ADT found to be greater than forecasted Traffic Forecast Information Center (TFIC) ADT were adjusted using growth rates observed between existing and forecasted TFIC ADT for adjacent segments.

Intersection turning movement volumes were developed utilizing the roadway volumes analyzed for the roadway segment analysis. Growth was applied per approach based on existing and forecasted Horizon Year 2040 ADT, distributed based on existing travel patterns, and balanced utilizing engineering judgement. Details on counts collected from TFIC and growth rates applied are provided in Appendix H of the LTA (Appendix N of this EIR).

Horizon Year 2050 Intersection Analysis

Table 3.10-11 summarizes the Year 2050 Without and With Project peak hour intersection analysis. As shown in Table 3.10–11, without the project, all intersections are calculated to operate acceptably at LOS D or better during both the AM and PM peak hours.

Table 3.10-11. Horizon Year (2050) Intersection Operations Without and With Project

#	Intersection	Control Type	Peak Hour	Year 2050 Conditions		Year 2050 With Project Conditions		Δ[3]	Consistent with City LOS Standards?[4]
				Avg. Delay (sec.)[1]	LOS[2]	Avg. Delay (sec.)[1]	LOS[2]		
1	N. Rancho Santa Fe / W. Mission Road	Signal	AM	13.7	B	13.9	B	0.2	Yes
			PM	15.5	B	16.0	B	0.5	Yes
2	N. Pacific Street (west) / W. Mission Road	Signal	AM	8.7	A	8.9	A	0.2	Yes
			PM	11.0	B	11.1	B	0.1	Yes
3	N. Pacific Street (east) / W. Mission Road	Signal	AM	11.0	B	10.9	B	-0.1	Yes
			PM	11.9	B	12.1	B	0.2	Yes
4	N. Rancho Santa Fe Road / Capalina Road	Signal	AM	27.9	C	29.8	C	1.9	Yes
			PM	39.7	D	47.7	D	8.0	Yes
5	N. Pacific Street / Capalina Road	SSSC[5]	AM	11.7	B	11.9	B	0.2	Yes
			PM	13.1	B	13.3	B	0.2	Yes
6	N. Rancho Santa Fe / SR-78 WB Ramps	Signal	AM	50.2	D	50.3	D	0.1	Yes
			PM	35.5	D	35.6	D	0.1	Yes
7	N. Rancho Santa Fe / SR-78 EB Ramps	Signal	AM	27.4	C	28.6	C	1.2	Yes
			PM	24.1	C	24.6	C	0.5	Yes
8	N. Las Posas Road / Descanso Avenue	Signal	AM	24.7	C	24.7	C	0.0	Yes
			PM	27.8	C	27.8	C	0.0	Yes
9	Project Driveway #1 / Capalina Road	SSSC[5]	AM	DNE[6]	DNE[6]	9.9	A	9.9	Yes
			PM	DNE[6]	DNE[6]	10.3	B	10.3	Yes
10	Project Driveway #2 / Capalina Road	SSSC[5]	AM	DNE[6]	DNE[6]	9.8	A	9.8	Yes
			PM	DNE[6]	DNE[6]	10.1	B	10.1	Yes

Source: CRA 2023a.

Notes: (1) Average Delay expressed in seconds per vehicle
(2) LOS = Level of Service
(3) Δ denotes the increase in delay due to project
(4) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.
(5) SSSC = Side Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experience by any of the movements.
(6) Intersection does not exist under Year 2050 Base condition

Horizon Year 2050 Segment Operations

Table 3.10-12 summarizes the segment operations throughout the study area for the Year 2050 Without and With Project daily street segment operations. As shown in Table 3.10-12, all of the study area segments are calculated to operate acceptably at LOS D without the project with the exception of the following roadway segment:

- N. Rancho Santa Fe Road, between SR-78 Eastbound Ramps and Descanso Avenue (LOS E).

With the addition of project traffic all of the study area segments would continue to operate at LOS D or better with the exception of N. Rancho Santa Fe Road between SR-78 Eastbound and Descanso Avenue, which would continue to operate at LOS E. As shown in Table 3.10-12, the trips associated with the proposed project would increase the volume/capacity ratio by 0.003, which does not surpass the 0.02 threshold for roadway segments operating at LOS E or F. Therefore, this study roadway segment would not require improvements as a result of the proposed project.

Table 3.10-12. Horizon Year 2050 Roadway Segment Operations Without and With Project

Roadway	Segment	Capacity (LOS E)[1]	Year 2050 Conditions			Year 2050 With Project Conditions			Δ[4]	Consistent with City LOS Standards? [5]
			Daily Volume	V/C[2]	LOS[3]	Daily Volume	V/C[2]	LOS[3]		
N. Rancho Santa Fe Road	W. Mission Road to Capalina	40,000	16,800	0.420	B	17,509	0.426	B	0.006	Yes
	Capalina Road to SR-78 Westbound Ramps	40,000	22,400	0.560	C	22,830	0.571	C	0.011	Yes
	SR-78 WB Ramps to SR-78 EB Ramps	40,000	30,400	0.760	D	30,674	0.767	D	0.007	Yes
	SR-78 EB Ramps to Descanso Avenue	40,000	37,400	0.935	E	37,520	0.938	E	0.003	Yes
N. Pacific Street	W. Mission Road to Capalina Road	8,000	2,000	0.250	A	2,179	0.272	A	0.022	Yes
N. Pacific Street	Capalina Road to Descanso Avenue	15,000	5,100	0.340	B	5,108	0.341	B	0.001	Yes
W. Mission Road	N. Rancho Santa Fe Road to N. Pacific Street	40,000	24,400	0.610	C	24,579	0.614	C	0.004	Yes
Capalina Road	N. Rancho Santa Fe Road to N.	15,000	4,300	0.287	A	5,174	0.345	B	0.058	Yes

Roadway	Segment	Capacity (LOS E)(1)	Year 2050 Conditions			Year 2050 With Project Conditions			Δ(4)	Consistent with City LOS Standards? (5)
			Daily Volume	V/C(2)	LOS(3)	Daily Volume	V/C(2)	LOS(3)		
	Pacific Street									
Descanso Avenue	N. Pacific Street to N. Las Posas Road	15,000	3,700	0.247	A	3,708	0.247	A	0.001	Yes

Source: CRA 2023a.

Notes: (1) Capacities based on City of San Marcos's Roadway Classification Table
(2) Volume to Capacity
(3) LOS = Level of Service
(4) Δ denotes a project-induced increase in the Volume to Capacity (V/C) ratio.
(5) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.

Community Facility District (Congestion Management) Participation

As a condition of project approval, the applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD2011-01 (Congestion Management).

Consistency with City of San Marcos Zoning Ordinance

The project has been designed to meet the development standards of the MU-2 zone, with the exception of the minimum FAR and the minimum setback requirements. California's Density Bonus Law (Government Code Section 65915) provides for additional density as well as incentives and waivers for qualifying projects. The project applicant is requesting a waiver for the reduced FAR and the setback. The project FAR would be 1.24 compared to the 1.75 minimum FAR identified in the MU-2 Development Standards (Table 20.225-2 of the Municipal Code). The project exceeds the minimum FAR (1.0) that was identified funder the MU-3 Development Standards. The building setback along W. Mission Road would be 0 feet. This reduced setback is based upon the City's request for additional right-of-way along W. Mission Road for future bike lane and sidewalk improvements. The building placement was shifted south, and the setback from W. Mission Road was reduced to zero feet. The exceptions are allowed with the requested waivers. The project meets all other aspects of the MU-2 Development Standards including the City's parking ratio through the allocation of an incentive, as provided under the State Density Bonus law.

Multiple Habitat Conservation Program

The project's consistency with the MHCP is analyzed in Section 3.3, Biological Resources, of this EIR. The analysis concludes that while the project is located within the MHCP, it is not located within a FPA as defined in the MHCP and Draft San Marcos Subarea Plan. Additionally, the project would not impact any sensitive habitat. The project, therefore, is consistent with the MHCP and Draft San Marcos Subarea Plan.

Easement Vacation

The proposed project would vacate a City slope easement per recorded document 2004-0229021. This easement is located in the northwestern portion of the project site. Vacation of this easement would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

3.10.5 Cumulative Impact Analysis

As described in Section 3.10 of the EIR, while the project seeks approval of a General Plan Amendment and Rezone of the project site, the proposed project would be consistent with the overarching goals and policies of the City's General Plan (see Table3.10-7). In addition to the City's General Plan, the proposed project would also be consistent with the City's Municipal Code, San Diego Association of Governments 2050 Regional Transportation Plan/Sustainable Communities Strategy, and applicable plans and polices. Furthermore, as analyzed throughout Chapter 3, implementation of the proposed project would not result in any significant unavoidable impacts that could further impact land use.

All cumulative projects would be subject to similar criteria as the proposed project, which would ensure compliance with existing applicable land use plans with jurisdiction over the project area. Any cumulative projects that propose amendments to the General Plan or Zoning Ordinance would be required to show that proposed uses would not result in significant environmental impacts due to a conflict with applicable policies in a similar way as the proposed project. Since all current and future projects would be analyzed for compatibility and compliance with land use regulations prior to approval, cumulative impacts related to land use and planning are determined to be less than significant.

Regarding the LOS analysis for compliance with the City's Mobility Element, the preceding analysis of the proposed project in Section 3.10.4 is based on methodologies that incorporate the cumulative effects of traffic from general growth and anticipated development in the area. This reflects background traffic and traffic from area-wide growth already approved by the City of San Marcos plus the development of the proposed project. As discussed in Section 3.10.4, the project would l not result in any required roadway or intersection improvements due to degraded LOS in the 2025 and 2050 time frames. Therefore, the project would not result in any inconsistencies with the goals and policies of the Mobility Element relating to LOS. Cumulative impacts would be **less than significant**.

3.10.6 Mitigation Measures

No land use impacts were identified; therefore, no mitigation measures are required.

3.10.7 Conclusion

The current General Plan land use and zoning designation is MU-3. With the proposed GPA and Rezone to MU-2, the proposed project would be consistent with the applicable goals and policies of the City's General Plan. The project would also be consistent with the MHCP. Based upon the analysis presented in Sections 3.10.3 and 3.10.4, including Table 3.10-7, implementation of the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The analysis also included a detailed analysis to determine the proposed project's consistency with the Mobility Element policies that address LOS. The proposed project would not result in any decreases in LOS to the studies roadways or intersection in the 2025 and 2050 timeframe. Impacts would be less than significant.

Figure 3.10-1. Traffic Analysis Study Area

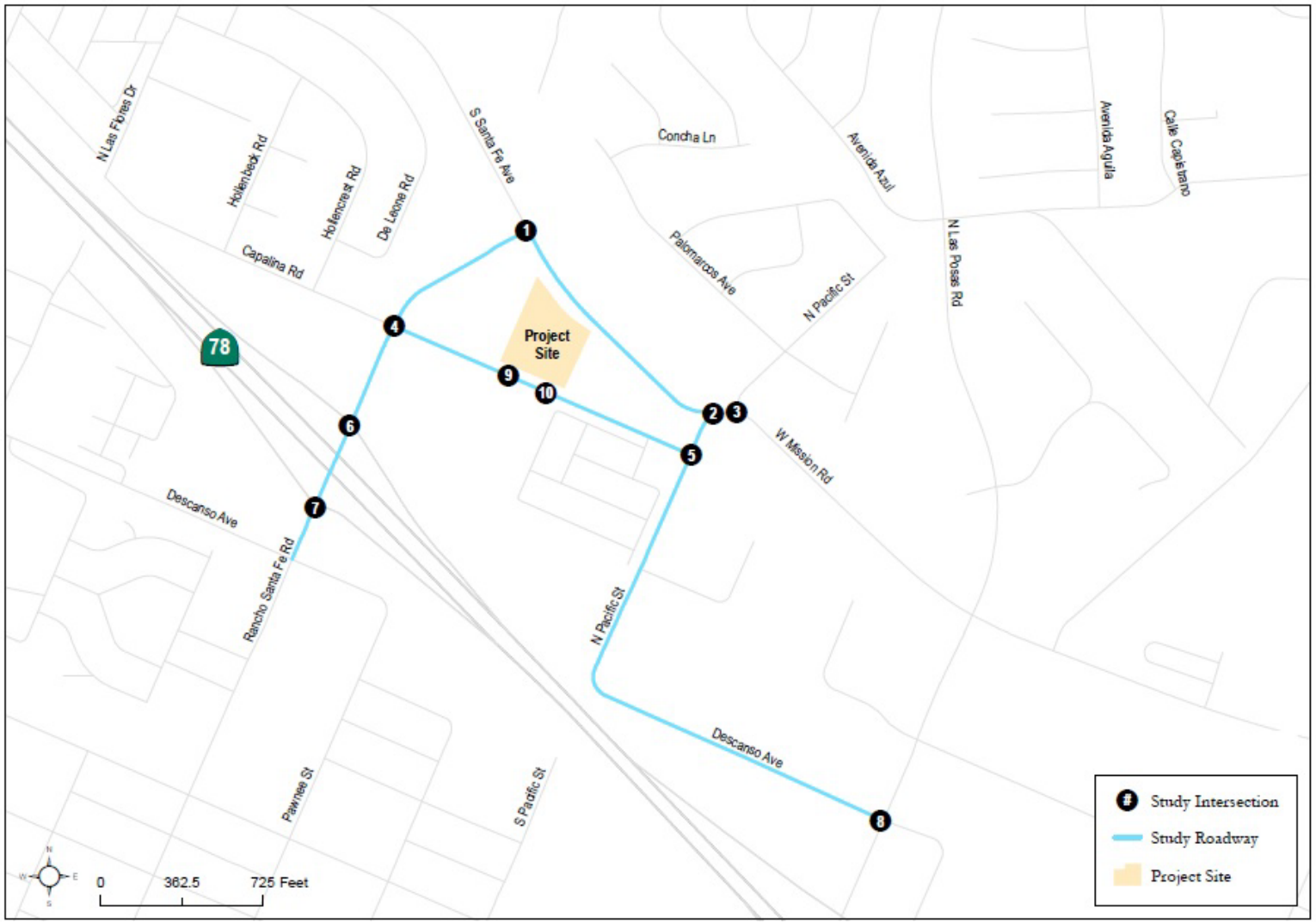


Table 3.10-13. Project Consistency with Applicable San Marcos General Plan Goals and Policies

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Land Use and Community Design Element		
Goal LU-1	Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.	The project would construct 119 residential apartments and six of the units would be affordable at the very low income level (50% of the Area Median Income or AMI). These units would add to the housing stock within the city and the greater North County area of San Diego and would meet the demand for future housing in the city, as contemplated by the City's General Plan. The proposed 4,000 s.f. of commercial use compliments the residential use and provides for a compatible mix of land uses. The project is consistent with this goal.
Goal LU-1, Policy LU-1.1/ Goal EJ-1, Policy EJ-1.1	Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.	The project area is developed with a mix of commercial, institutional, and residential uses. To the east of the project is the Crossroad Shopping retail center with various strip commercial establishments such as restaurants and salon services. To the south on the opposite side of Capalina Road is a church and the El Dorado mobile home community. To the west is an adjacent parcel (APN 219-115-35) which is zoned MU-3, containing various existing, abandoned, and demolished strip commercial establishments and parking areas. To the north of the project site is W. Mission Road, the SPRINTER rail line, and the Inland Rail Trail. North of that is an undeveloped area zoned MU-1 and then single family residential uses. The project's architectural design includes varied rooflines and facades to break up the bulk and scale of the building. Proposed materials include stucco walls, composite shingle roof material, resawn wood fascia, trim detailing, and metal railing. The project is consistent with this policy.
Goal LU-1 Policy LU-1.3/ Goal EJ-1, Policy EJ-1.2	Diversify land uses by providing mixed use land uses in strategic locations within the City that place housing adjacent to employment.	The project proposes a mixed-use development with residential and commercial uses. The project would add housing in an area that has commercial uses and is located within the vicinity of Palomar College, as well as other commercial land uses. The project is consistent with this policy.
Goal LU-1, Policy LU-1.4	Maintain the natural integrity of open space preserves by ensuring development projects are sensitively integrated along the edges of preserved or protected areas.	The project site is a vacant, disturbed parcel, located in a developed portion of the city and is adjacent to development. There are no open space or protected areas adjacent to the project site. The project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal LU-2	Promote development standards and land use patterns that encourage long-term environmental sustainability.	The project has been designed to maximize the residential density on a parcel in a developed portion of the city and adjacent to W. Mission Road which is served by bus service. The project is also 0.6 mile from the SPRINTER rail station. Based upon the analysis in this EIR, the project would reduce all significant impacts to below a level of significance through the incorporation of mitigation measures. The project is consistent with this goal.
Goal LU-2, Policy LU-2.1/ Goal EJ-1, Policy EJ-1.3	Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.	The project proposes a residential density of 47 units/acre. The project site is located within the SM-7 Mixed Use Transit Corridor as identified in the SANDAG Smart Growth Concept Map for North County. The project would install a sidewalk along the project frontage with Capalina Road and provide pedestrian connectivity to the sidewalk along W. Mission Road. The project site is adjacent to a North County Transit District (NCTD) bus stop and is 0.6 mile from the Palomar College SPRINTER rail station. The proposed project is consistent with this policy.
Goal LU-2, Policy LU-2.2	Encourage new development to be sited to respond to climatic conditions, such as solar orientation, wind, and shading patterns.	The project would comply with the latest applicable Title 24 standards. The 2019 Title 24 standards required that all low-rise residential buildings shall have a photovoltaic system meeting the minimum qualification requirements such that annual electrical output is equal to or greater than the dwelling's annual electrical usage. The 2022 Building Energy Efficiency Standards (Energy Code) improve upon the 2019 Energy Code for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more.
Goal LU-2, Policy LU 2.3	Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.	The project incorporates green features. As a design feature, the project would install 8 EV charging stations, 15 EV capable chargers and 36 EV ready chargers. The landscaping plan focuses on native, drought tolerant species and meets the City's Water Efficiency Landscaping Ordinance and Municipal Code, Title 20. This minimizes the use of water for irrigation. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal LU-2, Policy LU-2.5	Promote landscaping (e.g., native, drought-tolerant plants) that minimizes demands on water supply.	The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: Marina strawberry tree, Chinese flame tree, African sumac, Brisbane box, true green elm, crape myrtle, sweetshade, sweet bay, shrubby yew podocarpus, Carolina laurel, tipu tree and pink trumpet tree. The proposed project would also comply with the City's Model Water Efficient Landscape Ordinance (WELO) and Municipal Code, Title 20. The landscape concept plan is included as Figure 2-4 and the complete landscape plan and planting palette is included in Appendix A.2.
Goal LU-2, Policy LU-2.7/ Goal EJ-1, Policy EJ-1.5	Promote the installation of trees to reduce the urban heat island effect and green infrastructure to reduce storm water runoff.	The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: Marina strawberry tree, Chinese flame tree, African sumac, Brisbane box, true green elm, crape myrtle, sweetshade, sweet bay, shrubby yew podocarpus, Carolina laurel, tipu tree and pink trumpet tree. The proposed project would also comply with the City's WELO and Municipal Code, Title 20. The landscape concept plan is included as Figure 2-4. As discussed in greater detail in Section 3.9 (Hydrology/Water Quality) the project incorporates biofiltration features and source control and site design best management practices (BMPs) to reduce storm water runoff. The project is consistent with this policy.
Goal LU-3	Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.	The project's internal pedestrian circulation network would connect to the existing sidewalk along the project frontage on W. Mission Road. There is an NCTD bus stop on W. Mission Road in front of the project. The project is 0.6 mile to the SPINTER transit stop at Palomar College. The project is consistent with this goal.
Goal LU-3, Policy LU-3.1	Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.	The project's internal pedestrian circulation network would connect to the existing sidewalk along the project frontage on W. Mission Road. There is an NCTD bus stop on W. Mission Road in front of the project. The project is 0.6 mile to the SPINTER transit stop at Palomar College. The project is consistent with this policy.
Goal LU-3, Policy LU-3.4/	Provide non-motorized (pedestrian and bicycle) access/circulation within, and to,	The project includes internal walkways that would connect to sidewalks on W. Mission Road and Capalina Road. The project would construct a sidewalk on

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal EJ-5, Policy EJ-5.1	mixed-use centers to reduce reliance on the automobile.	Capalina Road along the project frontage which would improve the pedestrian connectivity in the greater project area. The project is consistent with the policy.
Goal LU-3, Policy LU-3.5/ Goal EJ-5, Policy EJ-5.2	Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.	The project incorporates 34,582 s.f. of common open space. The project incorporates pedestrian walkways which would connect to the City's larger pedestrian and bicycle network. There are no public use trails in the project vicinity. The project is consistent with this policy.
Goal LU-5	Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.	The project has been designed to incorporate architectural treatments, including varied rooflines to enhance the appearance of the project. This includes building articulation and setbacks and varied rooflines. Proposed materials include stucco walls, composite shingle roof material, resawn wood fascia, trim detailing, and metal railing. The conceptual landscape plan provides for a mix of trees, shrubs, and groundcover to further enhance the look and feel of the project. The project is consistent with this goal.
Goal LU-5, Policy LU-5.4	Require building and site design that respects the natural topography and iconic ridgelines that serve as the visual backdrop for San Marcos.	The project has been designed to respect the existing topography on the site, which is relatively flat. No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.35 miles northwest of the project site. The project is consistent with this policy.
Goal LU-5, Policy LU-5.7	Architecture shall be enhanced with high-end building materials, varied roof lines, and decorative details.	The project incorporates high-quality design. The project design incorporates architectural treatments and design to break up the bulk and scale of the buildings. This includes building articulation and setbacks and varied rooflines. Proposed materials include stucco walls, composite shingle roof material, resawn wood fascia, trim detailing, and metal railing. The project is consistent with this policy.
Goal LU-7	Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.	The project site is within the City of San Marcos, surrounded by existing development including commercial and residential uses. Existing services and utilities are present in proximity to the project. The project is in proximity to transit and provides sidewalks to encourage non-motorized transportation. The project is consistent with this goal.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal LU-7, Policy LU-7-2/ Goal EJ-5, Policy EJ-5.3	Coordinate pedestrian, transit and infrastructure upgrades with infill and redevelopment opportunities.	The project is in proximity to transit and would construct a sidewalk along the project frontage with Capalina Road. The project will also provide access to the W. Mission Road sidewalk and NCTD bus stop along the project frontage with W. Mission Road. The project is consistent with this goal.
Goal LU-8	Ensure that existing and future development is adequately serviced by infrastructure and public services.	As described further in Section 3.13 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire and police protection services would be offset with payment of appropriate development fees, including payment of Public Facility Fees (PFF) and annexation into and participation in applicable Community Facilities Districts (CFD). Impacts to parks would be offset through provision of on-site recreational facilities and payment of PFF. Additionally, as analyzed in Section 3.17 (Utilities and Service Systems) water and sewer services are available to serve the project and the project would either upgrade VWD facilities, pay applicable Water and Wastewater Capital Facility Fees to VWD per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this goal.
Goal LU-8, Policy LU-8.1	New development shall pay its fair share of required improvements to public facilities and services.	As described further in Section 3.13 (Public Services), the project's demand for fire and police protection services would be offset with payment of appropriate CFD and PFF fees. The project is also required to pay appropriate statutory fees for schools, which would ensure impacts to schools are less than significant. Impacts to parks would be offset through payment of the City's PFF (see Section 3.14, Recreation). Additionally, as analyzed in Section 3.17 (Utilities and Service Systems) water and sewer services are available to serve the project and the project would either upgrade VWD facilities, pay applicable Water and Wastewater Capital Facility Fees to VWD per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this goal.
Goal LU-8, Policy LU-8.2	Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.	As described further in Section 3.13 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire and police protection services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. Impacts to parks would be offset through provision of on-site recreational facilities and payment of PFF. Additionally, as analyzed in Section 3.17 (Utilities and Service Systems) water and sewer services

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		are available to serve the project and the project would either upgrade VWD facilities, pay applicable Water and Wastewater Capital Facility Fees to VWD per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this goal.
Goal LU-10	Fire protection, emergency services, and law enforcement: Provide effective, high-quality, and responsive services.	As described further in Section 3.13 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this goal.
Goal LU-10, Policy LU-10.1	Provide demand-based firefighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Marcos to meet existing and future demands.	As described further in Section 3.13 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this policy.
Goal LU-10, Policy LU-10.2	Work closely with the County of San Diego Sherriff's Department to determine and meet the community needs for adequate personnel, equipment, and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands.	As described further in Section 3.13 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for police protection services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this policy.
Goal LU-10, Policy LU-10.3	Continue to conduct Public Outreach and education regarding fire safety and crime prevention within San Marcos.	The San Marcos Fire Department public education program provides comprehensive fire education via presentations, informational demonstrations, health fairs, and station tours, among others. The San Diego County Sheriff's Department provides safety presentations to youth groups and community groups through their Community Oriented Policing and Problem Solving deputies. Deputies also attend Neighborhood Watch meetings. In addition, the Crime Prevention Unit focuses on community outreach regarding crime prevention techniques, current trends, and prevention education. The project's annexation into and contribution to the applicable CFD would aid in the continued provision of these services. The project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal LU-11	Schools: Ensure all residents have access to high-quality education.	Students generated by the project would attend La Mirada Academy for grades K-8 and San Marcos High School for grades 9-12. The project applicant would be required to pay all applicable development fees including payment of school mitigation fees, pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) as well as the City's Municipal Code Section 17.52.050, The project is consistent with this goal.
Goal LU-11, Policy LU-11.1	Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning educational opportunities are provided in superior, accessible facilities that complement the surrounding land uses.	The project would generate 60 students for SMUSD. The project developer would pay school mitigation fees to offset impacts to schools. The project is consistent with this policy.
Goal LU-11, Policy LU-11.2	Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.	The project would generate 60 students for SMUSD. The project developer would pay school mitigation fees to offset impacts to schools. The project is consistent with this policy.
Goal LU-12	Libraries: Provide library resources and services that meet the needs of the community.	While the proposed project does not include construction of any library facilities, this EIR has determined the project would not have a significant impact on library facilities (see Section 3.13, Public Services). The project is consistent with this goal.
Goal LU-12, Policy LU-12.1	Provide adequate library facilities and technological access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for self-learning and academic enrichment.	While the proposed project does not include construction of any library facilities, this EIR has determined the project would not have a significant impact on library facilities (see Section 3.13, Public Services). Additional library resources are also available to the community through CSUSM and Palomar Community College. The project is consistent with this policy.

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Goal LU-12, Policy LU-12.2	Accommodate technology needs of the community and locate accessible technology in the library.	While the proposed project does not include construction of any library facilities, project residents would have access to public computers through the existing library facilities. The project does not conflict with this policy.
Goal LU-13	Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis, to ensure an adequate water supply for existing and future residents.	The landscape plan for the project focuses on low-water use, native species. The Landscape Plan is presented in Figure 2-4. The proposed landscaping plan conforms to strict water conservation measures, including the City's WELO. Additionally, the project is required to pay Water Capital Facility Fees to VWD. The project is consistent with this goal.
Goal LU-13, Policy LU-13.1	Work closely with local and regional water providers to ensure high quality water supplies are available for the community.	VWD treats water to meet stringent state and federal standards. Ensuring quality at the source is cheaper than treatment. As described in Section 3.9 (Hydrology/Water Quality), the project would not contribute significant polluted runoff due to the incorporation of bioretention and water quality BMPs. Therefore, the project would not impact any local or regional water supplies. The project is consistent with this policy.
Goal LU-13, Policy LU-13.2	Actively promote water conservation programs aimed at reducing demand.	VWD promotes conservation and has issued drought alerts under drought conditions. While not currently in effect, future residential users within this district would be required to comply with any drought alerts and required conservation measures that would reduce demand. The project also incorporates low-water landscaping and would be required to comply with the City's WELO. The project is consistent with this policy.
Goal LU-13, Policy LU-13.3	Encourage exploration and use of deep underground wells to reduce reliance on treatable water.	The project would irrigate proposed landscaping with potable water. Groundwater use is not proposed by the project. The project's landscape plan focuses on low-water and drought-tolerant species and meets the requirements of the City's WELO. The project is consistent with this policy.
Goal LU-14	Wastewater: Ensure an adequate wastewater system for existing and future development.	Based on the analysis in Section 3.17 (Utilities and Service Systems), there is currently adequate wastewater treatment capacity to serve the project. The project proposes to connect to the existing 8-inch sewer main located in Capalina Road and would construct an 8-inch water main through the project site to create a looped water main connecting Capalina Road and W. Mission Road. Additionally, as part of the project design, the applicant will construct additional sewer infrastructure, as detailed in the VWD Water/Sewer Study (2023). The project applicant may also pay VWD Wastewater Capital Facility Fees for portions of the improvements. The project is consistent with this goal.

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Goal LU-14, Policy LU-14.1	Work closely with local service providers to ensure an adequate wastewater system for existing and future development is in place.	Based on the analysis in Section 3.17 (Utilities and Service Systems), there is currently adequate wastewater treatment capacity to serve the project. The project proposes to connect to the existing 8-inch sewer main located in Capalina Road and would construct an 8-inch water main through the project site to create a looped water main connecting Capalina Road and W. Mission Road. Additionally, as part of the project design, the applicant will construct additional sewer infrastructure, as detailed in the VWD Water/Sewer Study (2023). The project applicant may also pay VWD Wastewater Capital Facility Fees for portions of the improvements. The project is consistent with this policy.
Goal LU-14, Policy LU-14.2	Ensure development approval is directly tied to commitments for the construction or improvement of primary water, wastewater, and circulation systems.	Based on the analysis in Section 3.17 (Utilities and Service Systems), there is currently adequate water and wastewater treatment capacity to serve the project. Expansion of existing wastewater facilities would be necessary to accommodate buildout of the VWD services area per the 2018 Master Plan. The project would construct water and sewer improvements as detailed in Section 3.17.4 of the EIR. The project may also pay Water Capital Facility Fees to VWD and Wastewater Capital Facility Fees to VWD. The project is consistent with this policy.
Goal LU-15	Flood control and storm water drainage facilities: ensure adequate flood control and storm water drainage is provided by the community.	As identified in Section 3.9 (Hydrology/Water Quality), off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. Therefore, implementation of the project would not impact flood control or storm water drainage facilities. The project is consistent with this goal.
Goal LU-15, Policy LU-15.1	Implement activities, practices, procedures, or facilities that avoid, prevent, or reduce pollution of the San Marcos Storm Water Conveyance System and receiving waters.	As identified in Section 3.9 (Hydrology/Water Quality), implementation of the project's comprehensive water quality management plan, which incorporates biofiltration and BMPs, would ensure the project would treat runoff containing the pollutants of concern for locally impaired water bodies. Implementation of the project would reduce pollutants entering the San Marcos Storm Water Conveyance System and receiving waters. The project is consistent with this policy.
Goal LU-15, Policy LU-15.2	Improve inadequate or undersized drainage/flood control facilities to solve both small neighborhood and large regional drainage and flood control problems.	As identified in Section 3.9 (Hydrology/Water Quality), off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. No inadequate or undersized drainage/ flood control facilities were identified that serve the project

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		area. Therefore, implementation of the project would not impact flood control or storm water drainage facilities. The project is consistent with this policy.
Goal LU-15, Policy LU-15.3	Avoid, to the extent possible, development in floodplain and flood prone areas.	As identified in the Initial Study prepared for the proposed project (Appendix B.1), the project was determined to have no impact on 100-year flood hazards. The project does not propose development within a floodplain or flood prone area. The project is consistent with this policy.
Goal LU-15, Policy LU-15.4	Retain drainage courses in their natural condition, to the extent possible. Consider smaller-scale drainage improvements to protect the environment and avoid disturbing natural drainage courses; consider detention areas and raised building pads.	The project is adequately designed such that it would not substantially alter the existing drainage pattern of the site or area. The project detains and retains runoff through the site with combined water quality and hydromodification bioretention and BMPs. The project is consistent with this policy.
Goal LU-16	Solid waste: reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program.	As discussed in Section 3.17 (Utilities and Service Systems), the City of San Marcos has a disposal rate target of 8.9 lbs/person/day. If the City meets this target, the City is considered in compliance with the 50% diversion requirement of AB 939. The most recent data (2021) from CalRecycle identifies the annual per capital disposal rate for the City of San Marcos is 5.6 lbs/person/day. Thus, the City is exceeding their current targets for diversion. In accordance with AB 34, the project would be required to achieve a 75 % waste diversion rate. All green waste would be diverted from landfills and recycled as mulch. The Sycamore Sanitary Landfill has sufficient permitted capacity to accommodate the project's solid waste disposal needs. The project is consistent with this goal.
Goal LU-16, Policy LU-16.1	Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services.	Non-recyclable waste, including general trash and green materials, would be collected and transported for disposal by EDCO, a licensed hauler. According to Section 3.17 (Utilities and Service Systems), the Sycamore Sanitary Landfill has sufficient permitted capacity to accommodate the project's solid waste disposal needs. In accordance with AB 341, the project would be required to achieve a 75% waste diversion rate. All green waste would be diverted from landfills and recycled as mulch. The project is consistent with this policy.
Goal LU-16, Policy LU-16.2	Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.	The City of San Marcos is in compliance with AB 939, which requires 50% waste diversion through recycling. The project is consistent with this policy.

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Goal LU-17	Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective, and efficient services for San Marcos.	As discussed in Section 3.17 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known at this time. The project would be served by SDG&E for electricity and gas service. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing infrastructure within Capalina Road or W. Mission Road. This work would take place within existing right-of-way and would not disturb any vegetation. The project would also relocate an SDG&E transformer located on Capalina Road. The project is consistent with this goal.
Policy LU-17.2	Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.	As discussed in Section 3.17 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known at this time. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing infrastructure within Capalina Road or W. Mission Road. This work would take place within existing right-of-way and would not disturb any vegetation. The project would also relocate an SDG&E transformer located on Capalina Road. The project is consistent with this policy.
Policy LU-17.3	The City shall prohibit above ground utility equipment within any of the pedestrian pathway and street frontage areas. All above ground utilities shall be placed either within; "wet closets" within the buildings, underground vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in advance to coordinate utilities prior to approval of the final street improvement plans for both	As discussed in Section 3.17 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known. The project would be served by SDG&E for electricity and gas service. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing infrastructure within Capalina Road or W. Mission Road. This work would take place within existing right-of-way and would not disturb any vegetation. The project would also relocate an SDG&E

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
	public and private street frontages and prior to submittal of building permits.	transformer located on Capalina Road. No above ground utility equipment is proposed. The project is consistent with this goal.
Mobility Element		
Goal M-1	Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.	The project would contribute to the overall pedestrian connectivity in the project vicinity through the construction of a sidewalk along the project frontage. The project would also provide a pedestrian access gate for future residents so they can access the sidewalks on W. Mission Road. The project is consistent with this goal.
Goal M-1, Policy M-1.1	Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map.	Implementation of the proposed project as a MU-2 development would decrease the trip generation for the project site compared to what could be developed under an MU-3 (non-residential mixed use) scenario. Based upon the traffic analyses prepared for the project by CRA (2023a and 2023b), the project does not result in any transportation impacts, nor does it result in any safety concerns. The project is consistent with this policy.
Goal M-1, Policy M-1.2	Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.	The project has been designed to include an internal drive aisle. No private streets are proposed. The project does not result in any significant transportation related impacts and no improvements beyond what is already proposed as part of the project design are required. The project is consistent with this policy.
Goal M-1, Policy M-1.3/ Goal EJ-1, Policy EJ-1.6	Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City. (See Policy M-1.3)	The project would be required to prepare a TDM plan consistent with the reports of Measure T-9 of the City's Climate Action Plan Consistency Review Checklist. The project is consistent with this policy.
Goal M-1, Policy M-1.4	Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element: LOS D or better for Vehicles as a	The location transportation analysis prepared for the project (Appendix N) relied on this LOS technique to determine project-related impacts to the circulation network. As summarized in Section 3.10.4 (Land Use and Planning) of this EIR, there would not be any degradation of LOS to below acceptable levels with implementation of the project. The project would be consistent with this policy.

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	prioritized mode or the City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).	
Goal M-1, Policy M-1.6/ Goal EJ-2, Policy EJ-2.10	Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.	The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project would also construct a sidewalk along the project frontage with Capalina Road which would improve pedestrian connectivity in the greater project area. The project is consistent with this policy.
Goal M-1, Policy M-1.7/ Goal EJ-2, Policy EJ-2.11	Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.	Complete streets balance the needs of all users, both motorized and non-motorized, in design and construction. The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project would also construct a sidewalk along the project frontage with Capalina Road which would improve pedestrian connectivity in the greater project area. The project is consistent with this policy.
Goal M-2	Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.	Travel modes within and surrounding the project area include vehicular, pedestrian, and bicycle. The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project would also construct a sidewalk along the project frontage with Capalina Road which would improve pedestrian connectivity in the greater project area. The project is consistent with this policy.
Goal M-2, Policy M-2.1	Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods; while maintaining the City's desire to provide connectivity on the roadway network.	The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project would also construct a sidewalk along the project frontage with Capalina Road which would improve pedestrian connectivity in the greater project area. The project is consistent with this policy.
Goal M-3	Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.	The project would construct a sidewalk along the project frontage on Capalina Road which would enhance pedestrian connectivity in the project vicinity. There is a NCTD bus stop along the project frontage at W. Mission Road and the Palomar Station SPRINTER station is 0.6 miles from the project site. As a design feature,

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		the project would install 8 EV chargers, 15 EV capable parking spaces and 36 EV ready parking spaces. Therefore, the project is consistent with this goal.
Goal M-3, Policy M-3.1/ Goal EJ-1, Policy EJ-1.8	Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.	The project would construct a sidewalk along the project frontage on Capalina Road which would enhance pedestrian connectivity in the project vicinity. The project would also provide residents access to W. Mission Road via a pedestrian gate. Compared to what could be developed under the MU-3 (non-residential mixed use) zoning on the project site, the proposed project would reduce the number of trips. This results in a corresponding reduction in air emissions and GHG emissions. The placement of high density residential along a transit corridor would provide for convenient nearby transit access to future residents of the project. Therefore, the project is consistent with this policy.
Goal M-3, Policy M-3.2	Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.	The project would not impact any existing bicycle or pedestrian infrastructure. The project would construct a sidewalk along the project frontage with Capalina Road which would enhance pedestrian connectivity in the project vicinity. The sidewalk would be designed to City standards. Therefore, the project is consistent with this policy.
Goal M-3, Policy M-3.3	Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.	The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project would also construct a sidewalk along the project frontage with Capalina Road which would improve pedestrian connectivity in the greater project area. The project is consistent with this policy.
Goal M-3, Policy M-3.5/ Goal EJ-5, Policy EJ-5.5	Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.	The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project would also construct a sidewalk along the project frontage with Capalina Road which would improve pedestrian connectivity in the greater project area. The project is consistent with this policy.
Goal M-3, Policy M-3.9/ Goal EJ-5, Policy EJ-5.6	Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-	The project would also construct a sidewalk along the project frontage with Capalina Road which would improve pedestrian connectivity in the greater project area. The landscape concept plan includes street trees along Capalina Road and

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	scale lighting, way finding signage, transit shelters, and other appropriate amenities.	along the project frontage with W. Mission Road. The project is consistent with this policy. The project is consistent with this policy.
Conservation and Open Space Element		
Goal COS-1	Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.	A biological technical report (Appendix D.1) and rare plant survey memorandum (Appendix D.2) were prepared for the project and summarized in Section 3.3. (Biological Resources). The project site is disturbed and does not support any sensitive habitat or sensitive species. The project has the potential to impact avian species protected under the Migratory Bird Treaty Act if tree removal, vegetation removal, or other construction activities occur during the nesting season. Implementation of mitigation measure MM-BIO-1 would reduce this potential impact to below a level of significance. The project is consistent with this goal.
Goal COS-1, Policy COS-1.1	Support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.	A biological technical report (Appendix D.1) and rare plant survey memorandum (Appendix D.2) were prepared for the project and summarized in Section 3.3 (Biological Resources). The project site is disturbed and does not support any high quality habitat areas, nor does it support any sensitive habitat, or sensitive species. The project is consistent with this policy.
Goal COS-1, Policy COS-1.2	Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.	No oak woodlands, jurisdictional wetlands, or habitat linkages occur on the project site. The project site is disturbed and does not support any sensitive habitat (Dudek 2023a). The project is consistent with this policy.
Goal COS-2	The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.	The project site is an undeveloped parcel in a developed portion of the city and has been identified for development in the City's General Plan. The project site has disturbed vegetation and does not support any sensitive habitat or any agricultural resources. The project is consistent with this policy.
Goal COS-2, Policy COS-2.1	Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.	A total of 34,582 s.f. of open space is proposed. This represents approximately 32% of the project site. This includes a mix of common open space and private

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		open space. These areas would provide recreation for the future residents. The project is consistent with this policy.
Goal COS-2, Policy COS-2.2	Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.	The project site is an undeveloped parcel in a developed portion of the city and has been identified for development in the City's General Plan. The project site has disturbed vegetation and does not support any sensitive habitat or any agricultural resources (Dudek 2023a). There are no flood hazards management issues with the project. Water supply and resources were addressed in Section 3.17 (Utilities and Service Systems) and it was concluded that there is adequate potable water service to serve the project. The project also incorporates low-water landscaping and would be required to comply with the City's WELO. The project is consistent with this policy.
Goal COS-2, Policy COS-2.5	Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.	The proposed project's potential impacts to cultural resources are detailed in Section 3.4 (Cultural Resources) of the EIR. A cultural resources report was also prepared for the project and is included as Appendix E of the EIR. The City reached out to tribes consistent with the requirements of SB 18 and AB 52 and met with tribes that requested consultation. No historical resources were identified on the site. The project would not impact any known cultural resources on the project site; however, there is a potential to impact resources that are unknown at this time. Mitigation measures are incorporated into the EIR (MM-CR-1 through MM-CR-4) to reduce impacts to cultural resources to below a level of significance. The project is consistent with this policy.
Goal COS-2, Policy COS-2.6	Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.	Four Mexican fan palms would be removed to prepare the site for development. The proposed landscape plan includes 83 trees. The project would replace trees at an approximate 21:1 ratio, which greatly exceeds the requirements of a 1:1 replacement ratio. Proposed tree species include: Marina strawberry tree, Chinese flame tree, African sumac, Brisbane box, true green elm, crape myrtle, sweetshade, sweet bay, shrubby yew podocarpus, Carolina laurel. tipu tree, and pink trumpet tree. The project is consistent with this policy.
Goal COS-3	Protect natural topography to preserve and enhance the natural beauty of San Marcos.	According to Section 3.1 (Aesthetics), the project has been designed to respect the existing topography on the site, which is relatively flat. Views of the surrounding hillsides would remain unobstructed from SR-78. The project site is not a protected scenic vista. The project also incorporates extensive design features that ensure that the visual character changes blend with the existing

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		topography and surrounding development. The project is consistent with this goal.
Goal COS-3, Policy COS-3.1	Preserve scenic resources, including prominent landforms such as Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas through conservation and management policies.	None of the prominent landforms as identified in the General Plan are on-site. While implementation of the proposed project would result in changes in the viewshed, development would not alter or impede views of prominent landforms. Views to prominent landforms would remain unobstructed. In addition, the project site is not a protected scenic vista. The project is consistent with this policy.
Goal COS-3, Policy COS-3.2	Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the hillsides, ridgelines, canyons, and view corridors that comprise the visual character in San Marcos.	According to Section 3.1 (Aesthetics), the Specific Plan includes an overall architectural design theme to ensure a pleasant, orderly, and visually appealing development. The proposed architectural design includes elevation treatments, varied rooflines, and a mix of materials. The project has been designed to respect the existing topography on the site. Landscape materials would be used to enhance architectural elements and the provided street trees would enhance the pedestrian experience along the project frontages. The project is consistent with this policy.
Goal COS-3, Policy COS-3.3	Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.	The project has been designed to respect the existing topography. The project site is relatively flat and located in a lower-elevation portion of the city. There are no view corridors in the project vicinity nor are there any wildlife corridors on the project site. The project site is not identified as a scenic vista. The project is consistent with this policy.
Goal COS-3, Policy COS-3.4	Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.	Development of the proposed project would create new sources of light at a site that is currently undeveloped. Lighting would be guided by the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards to aid in the preservation of dark sky conditions. Lighting impacts were determined to be less than significant (Section 3.1 Aesthetics). The project is consistent with this policy.
Goal COS-4	Improve regional air quality and reduce GHG emissions that contribute to climate change.	The project's impact to air quality would be less than significant as described in Section 3.2 (Air Quality) of this EIR. The project would not conflict with or obstruct implementation of any air quality plan or violate any air quality standard. Based upon the analysis in Section 3.7 (Greenhouse Gas), GHG emissions under the proposed project would be 49.5% less than if the project was built out under the current General Plan Designation of MU3. The project would also implement all of

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		the applicable CAP Consistency Review Checklist (CAP Checklist) measures. The project is consistent with this goal.
Goal COS-4, Policy COS-4.1/ Goal EJ-1, Policy EJ-1.9	Continue to work with the U.S. EPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.	Implementation of the proposed project would not exceed any air quality standard during construction or operation. Impacts are less than significant. The project is consistent with this policy.
Goal COS-4, Policy COS-4.3/ Goal EJ-1, Policy EJ-1.11	Participate in regional efforts to reduce GHG emissions.	The project is not anticipated to impair implementation of AB 32. Development of the project would not affect regional efforts to reduce GHG emissions. The City's updated 2020 CAP quantifies community emissions, identifies emission reduction targets, and specifies climate action measures to reduce GHG emissions. Based upon the analysis in Section 3.7 (Greenhouse Gas), GHG emissions under the proposed project would be 49.5% less than if the project was built out under the current General Plan Designation of MU3. The project would also implement all of the applicable CAP Checklist measures. The project is therefore consistent with the City's CAP and the project would be consistent with the goals of AB 32. The project is consistent with this policy.
Goal COS-4, Policy COS-4.4/ Goal EJ-1, Policy EJ-1.12	Quantify community wide and municipal GHG emissions, set a reduction goal, identify, and implement measures to reduce GHG emissions as required by governing legislation.	The City's updated 2020 CAP quantifies community emissions, identifies emission reduction targets, and specifies climate action measures to reduce GHG emissions. Based upon the analysis in Section 3.7 (Greenhouse Gas), GHG emissions under the proposed project would be 49.5% less than if the project was built out under the current General Plan Designation of MU3. The project would also implement all of the applicable CAP Checklist measures. The project is therefore consistent with the City's CAP and the project would be consistent with the goals of AB 32. The project is consistent with this policy.
Goal COS-4, Policy COS-4.5/ Goal EJ-1, Policy EJ-1.13	Encourage energy conservation and the use of alternative energy sources within the community.	As discussed in Section 3.17 (Utilities and Service Systems), the proposed project includes various on-site features and measures to reduce the proposed project's energy consumption. Further, the proposed project would be required to be consistent with appropriate mandatory project design features in the CAP Consistency Review Checklist that would reduce operational electricity consumption. The project would be built-in compliance with Title 24 requirements applicable at that time. Additionally, as a design feature, the project would install 8 spaces with EV chargers, 15 EV capable spaces and 36 EV ready spaces. The

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		project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-4, Policy COS-4.6 Goal EJ-1, Policy EJ-1.14	Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.	As discussed in Section 3.17 (Utilities and Service Systems), the proposed project includes various on-site features and measures to reduce the proposed project's energy consumption. Further, the proposed project would be required to be consistent with appropriate mandatory project design features in the CAP Consistency Review Checklist that would reduce operational electricity consumption. The project would be built-in compliance with Title 24 requirements applicable at that time. Additionally, as a design feature, the project would install 8 spaces with EV chargers, 15 EV capable spaces and 36 EV ready spaces. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-4, Policy COS-4.8/ Goal EJ-1, Policy EJ-1.15	Encourage and support the generation, transmission, and use of renewable energy.	Development on the project site would meet the requirements of California's Building Energy Efficiency Standards, which focus on several key areas to improve the energy efficiency of newly constructed buildings. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-5	Reduce water consumption and ensure reliable water supply through water efficiency, conservation, capture, and reuse.	VWD promotes conservation and has issued drought alerts under drought conditions. Future residential users within this district would be required to comply with any issued alerts and required conservation measures that would reduce demand. The project proposes a landscape plan that emphasizes low water use species in adherence to the City of San Marcos Water Efficient Landscape Ordinance. The project is consistent with this goal.
Goal COS-6	Protect and restore appropriate surface water and groundwater beneficial uses through prioritizing the improvement of locally impaired water bodies within the City of San Marcos subwatersheds.	The project is located within a watershed with numerous impaired water bodies. The BMP Design Manual requires that pollutants of concern for each impaired water body in the watershed be treated by engineered treatment controls to a medium pollutant removal efficiency or better prior to leaving the project site. The project proposes treatment of storm water runoff via biofiltration facilities prior to discharge, which would result in a medium or high efficiency for removal of the pollutants of concern. Any groundwater infiltration would likely reach surface flows before reaching groundwater due to the approximate depth to groundwater.

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		Therefore, according to Section 3.9 (Hydrology/Water Quality), the project would not have a potentially significant adverse impact on groundwater quality or result in significant impacts to impaired water bodies. The project is consistent with this goal.
Goal COS-6, Policy COS-6.2	Promote watershed stewardship as the community norm.	The project includes a comprehensive water quality management approach, which incorporates biofiltration and the use of BMPs, to ensure the project would not contribute any pollutants to area watersheds. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a Stormwater Pollution Prevention Plan, and implement BMPs in compliance with the National Pollution Discharge Elimination System (NPDES) permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would contribute to watershed stewardship. The project is consistent with this policy.
Goal COS-7	Achieve sustainable watershed protection for surface and ground water quality that balances social, economical, and environmental needs.	The project includes a comprehensive water quality management approach, which incorporates biofiltration and the use of BMPs, to ensure the project would not contribute any pollutants to area watersheds. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would contribute to watershed stewardship. The project is consistent with this policy.
Goal COS-8	Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.	Implementation of the project's comprehensive water quality management plan, which incorporates biofiltration and the use of BMPs, would ensure that the project would treat runoff containing the pollutants of concern for locally impaired water bodies. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would reduce construction effects on receiving water quality and protect stormwater runoff. The project is consistent with this policy.
Goal COS-8, Policy COS-8.4	Require new development and redevelopment to protect the quality of water bodies and natural drainage systems	Implementation of the project's comprehensive water quality management plan, which incorporates biofiltration and the use of BMPs, would ensure that the project would treat runoff containing the pollutants of concern for locally

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	through site design, source controls, storm water treatment, runoff reduction measures, BMPs, LID, hydromodification strategies consistent with the Current San Diego RWQCB Municipal Stormwater NPDES Permit, and all future municipal stormwater permits.	impaired water bodies. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would reduce construction effects on receiving water quality and protect stormwater runoff. The project is consistent with this policy.
Goal COS-10	Establish and maintain an innovative, sustainable solid waste collection, recycling, and disposal delivery system for present and future generations.	As discussed in Section 3.17 (Utilities and Service Systems), according to CalRecycle, the City of San Marcos has a disposal rate target of 8.9 lbs/person/day. If the City meets this target, the City is considered in compliance with the 50% diversion requirement of AB 939. The most recent data (2021) from CalRecycle identifies the annual per capita disposal rate as 5.6 pounds per person per day (CalRecycle 2021). Thus, the City is exceeding their target for diversion. In accordance with AB 34, the project would be required to achieve a 75% waste diversion rate. All green waste would be diverted from landfills and recycled as mulch. The Sycamore Sanitary Landfill has sufficient permitted capacity to accommodate the project's solid waste disposal needs. The project is consistent with this goal.
Goal COS-10, Policy COS-10.1	Promote the curbside recycling program to divert residential refuse from the landfills.	The City of San Marcos is in compliance with AB 939, which requires 50% waste diversion through recycling. The project would participate in the City's recycling efforts. The project is consistent with this policy.
Goal COS-11	Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.	A cultural resources report was prepared for the project site, summarized in Section 3.4 (Cultural Resources), and included as Appendix E of this EIR. Mitigation measures are incorporated (MM-CR-1 through MM-CR-4) to reduce potential impacts to archaeological resources to below a level of significance. There are no historical resources on the project site. The project would also implement mitigation measure MM-GEO-1 to minimize the potential for impacts to paleontological resources. The project is consistent with this goal.
Goal COS-11, Policy COS-11.1	Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.	A cultural resources report was prepared for the project site, summarized in Section 3.4 (Cultural Resources), and included as Appendix E of this EIR. Mitigation measures are incorporated (MM-CR-1 through MM-CR-4) to reduce potential impacts to archaeological resources to below a level of significance.

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		There are no historical resources on the project site. The project is consistent with this policy.
Goal COS-11, Policy COS-11.2	Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction offsite, and/or photo-preservation.	There are no historical resources on the project site, therefore the project would not have the potential to impact such resources. The project is consistent with this policy.
Parks, Recreation and Community Health Element		
Goal PR-1	Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high quality recreational facilities.	Section 3.14 (Recreation) analyzed the project's impact on recreational facilities. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes 25,700 s.f. of common open space and 7,632 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this goal.
Goal PR-1, Policy PR-1.1/ Goal EJ-2, Policy EJ-2.6/ Goal EJ-5, Policy EJ-5.7	Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.	Section 3.14 (Recreation) analyzed the project's impact on recreational facilities. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes 25,700 s.f. of common open space and 7,632 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.3/	Ensure that the development of parks, trails, and recreation facilities and services keeps	Section 3.14 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population

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Goal EJ-2,Policy EJ-2.7	pace with development and growth within the City.	by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the city, in addition to what is provided on-site. The project includes 25,700 s.f. of common open space and 7,632 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.4/ Goal EJ-5, Policy EJ-5.8	Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.	Section 3.14 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes 25,700 s.f. of common open space and 7,632 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.5/ Goal EJ-5, Policy EJ-5.8	Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.	Section 3.14 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City in addition to what is provided on-site. The project includes 25,700 s.f. of common open space and 7,632 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.7	Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance, and creates a safe and comfortable environment.	Safety considerations of the proposed project are discussed in Section 3.13 (Public Services). As proposed, the proposed project, including development of park and open space areas, does not present any unique public safety challenges. The proposed project is consistent with this policy.
Goal PR-2, Policy PR-2.2/ Goal EJ-5, Policy EJ-5.10	Implement the trail network per the Master Trails Plan to increase opportunities for physical activity (e.g., walking, biking),	The City's Master Trail Plan does not indicate any trails along the project frontage. The closest trail is the Inland Rail Trail. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the city, in

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	healthy lifestyles, and to reduce reliance on cars.	addition to what is provided on-site. The project includes 25,700 s.f. of common open space and 7,632 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Safety Element		
Goal S-1	Reduce risks to the community from earthquakes by regulating new development and redevelopment to prevent the creation of new geologic and seismic hazards.	The project would implement all recommendations from the geotechnical investigation (Appendix G of the EIR). Additionally, development on the project site would be subject to the requirements of the latest California Building Code (CBC) for resistance to seismic shaking and would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of the State of California Occupational Safety and Health Administration (Cal/OSHA) to minimize risks from earthquakes. The project is consistent with this goal.
Goal S-1, Policy S-1.1	Reduce the risk of impacts from geologic and seismic hazards by applying current and proper land use planning, development engineering, building construction, and retrofitting requirements.	The project would implement all recommendations from the geotechnical investigation (Appendix G of the EIR). Additionally, development on the project site would be subject to the requirements of the latest California Building Code for resistance to seismic shaking, and would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of Cal/OSHA to minimize risks from earthquakes. The project is consistent with this policy.
Goal S-1, Policy S-1.2	Investigate specific groundwater levels and geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture, liquefaction, or other geologic hazards are suspected.	There is no known faulting at the project site so the potential for surface fault rupture is low. The project site is not located in a State liquefaction susceptibility zone and is mapped in an area with generally zero to low liquefaction. The project is consistent with this policy.
Goal S-2	Minimize the risk to people, property, and the environment due to flooding hazards.	The project site is not located within a 100-year flood hazard area nor within the City's Flood Damage Prevention Overlay Zone. Additionally, off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. The project is consistent with this goal.

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Goal S-2, Policy S-2	Require existing private development to take responsibility for maintenance and repair of structures to resist flood damage.	The project site is not located within a 100-year flood hazard area nor within the City's Flood Damage Prevention Overlay Zone. Additionally, off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. The project is consistent with this policy.
Goal S-3	Minimize injury, loss of life, and damage to property results from structure or wildland fire hazards.	Implementation of the proposed project would result in a developed area with roads, structures, and landscape vegetation. The project site is located in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. No impact is identified for this issue area. The proposed project is consistent with this goal.
Goal S-3, Policy S-3.1	Require development to be located, designed, and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility, and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.	The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. No impact is identified for this issue area. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.2	Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers.	According to Section 3.13 (Public Services), the project would have a less than significant impact on fire protection services. Additional staff and resources would be provided via Community Facilities District No. 2001-01, into which the project would annex and pay required mitigation fees. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.3	Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.	Access to the project site would be via two unsignalized driveways on Capalina Road. Driveways and internal drive aisles have been designed to allow for access by emergency response equipment including fire trucks. The fire Marshal has reviewed the project plans. The proposed project is consistent with this policy.

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Goal S-3, Policy S-3.4	Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.	The Fire Marshal has reviewed the project plans. The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.6	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. 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 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.	The Fire Marshal has reviewed the project plans. The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this policy.
Goal S-4	Protect life, structures, and the environment from the harmful effects of hazardous materials and waste.	During construction, there is a potential for accidental upset of fuels, lubricants, and other materials; however, there are existing federal and state standards in place for the handling, storage, and transport of these materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. Additionally, the project site and surrounding properties are not considered hazardous materials sites. See Section 3.8 (Hazards and Hazardous

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		Materials) for additional information. The proposed project is consistent with this goal.
Goal S-4, Policy S-4.1	Promote and support the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials in accordance with applicable federal, State, and local regulations.	During construction, there is a potential for accidental upset of fuels, lubricants, and other materials; however, there are existing federal and state standards in place for the handling, storage, and transport of these materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. Additionally, the project site and surrounding properties are not considered hazardous materials sites. See Section 3.8 (Hazards and Hazardous Materials) for additional information. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.2/ Goal EJ-1, Policy EJ-1.21	Require areas of known or suspected contamination to be assessed prior to reuse or redevelopment. Plan for reuse of contaminated areas in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.	A Phase I ESA was prepared for the project (Appendix J). The project site was not listed on any list of hazardous materials sites. Phase I concluded there is a low likelihood that recognized environmental conditions are present at the project site as a result of the current or historical land uses or from a known and reported off-site source. The project would not develop an area of known or suspected contamination. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.3/ Goal EJ-1, Policy EJ-1.22	Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected.	The proposed project is not anticipated to generate, release, or use large amounts of hazardous materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. The proposed project is not anticipated to impact any sensitive uses in the project vicinity. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.4/ Goal EJ-1, Policy EJ-1.23	Avoid locating sensitive uses near established hazardous materials users or industrial areas where incompatibilities would result, except in cases where appropriate safeguards have been developed and implemented.	A Phase I ESA was prepared for the proposed project site (Appendix J). The project site was not listed on any list of hazardous materials sites. The Phase I ESA concluded that there is a low likelihood that recognized environmental conditions are present at the project site as a result of the current or historical land uses or from a known and reported off-site source. The proposed project would not place sensitive uses near any known hazardous materials users or industrial areas. The proposed project is consistent with this policy.

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Goal S-5	Establish and maintain an effective emergency response program to respond to disasters and maintain continuity-of-life support functions during an emergency.	The Safety Element of the General Plan states that W. Mission Road is one of the east/west streets that should remain open and passable during an emergency. San Marcos is also included in the San Diego County Multi-Jurisdictional Hazard Mitigation Plan, which identifies risks posed by natural and human-caused disasters. The project provides for two driveways and the project has been reviewed by the Fire Marshal. According to Section 3.8 (Hazards and Hazardous Materials), the project would not impact any roadway or staging areas identified in any emergency planning documents. The project is consistent with this goal.
Goal S-5, Policy S-5.3	Develop, implement, and maintain an effective evacuation program for areas of risk in the event of a disaster.	The San Marcos Emergency Operations Plan identifies several main thoroughfares as primary evacuation corridors in an emergency. The project provides two driveway access points on Capalina Road. According to Section 3.8 (Hazards and Hazardous Materials), the project would not impact any roadway or staging areas identified in any emergency planning documents. The project is consistent with this policy.
Goal S-6	Provide neighborhood safety through effective law enforcement.	Current staff levels are adequate to meet current law enforcement demand; however, development of the proposed project would increase this demand. To supplement police protection services, the project would contribute to CFD 98-01 Improvement Area #1. The project is consistent with this goal.
Goal S-6, Policy S-6.1	Continue to maintain demand-based law enforcement service levels to reduce the risk of criminal activity.	Current staff levels are adequate to meet current law enforcement demand; however, development of the proposed project would increase this demand. To supplement police protection services, the project would contribute to CFD 98-01 Improvement Area #1. The project is consistent with this policy.
Goal S-6, Policy S-6.2	Continue public education efforts and community outreach programs to promote community involvement in crime and drug prevention.	The San Diego County Sheriff's Department provides presentations to schools through their COPPS deputies. A school resource officer who handles all crimes relating to school students is also assigned to high schools within the City of San Marcos. The project's contribution to CFD 98-01 Improvement Area #1 would aid in the continued provision of these services. The project is consistent with this policy.
Goal S-6, Policy S-6.3/ Goal EJ-4, Policy EJ-4.12	Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.	The San Diego County Sheriff's Department provides CPTED reviews through their crime prevention unit. The project's required contribution to a CFD would aid in the continued provision of this service. The Sheriff's Department has reviewed all project plans. The project is consistent with this policy.

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Goal S-7	Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.	The project site is located within Review Area 2 of the McClellan-Palomar airport influence area and may be subject to annoyances associated with noise, vibration, and overflights. Consistent with the ALUCP, recordation of overflight notification documents would be required as a condition of project approval. Review Area 2 also limits heights of structures in areas of high terrain. The project site is not characterized as high terrain and proposed development would remain below surrounding prominent topographic features. The project is consistent with this goal.
Goal S-7, Policy S-7.1	Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.	The project site is located within Review Area 2 of the McClellan-Palomar airport influence area and may be subject to annoyances associated with noise, vibration, and overflights. Consistent with the ALUCP, recordation of overflight notification documents would be required as a condition of project approval. Review Area 2 also limits heights of structures in areas of high terrain. The project site is not characterized as high terrain and proposed development would remain below surrounding prominent topographic features. The project is consistent with this goal.
Noise Element		
Goal N-1	Promote a pattern of land uses compatible with current and future noise levels.	The noise study prepared for the project (Appendix O) modeled ambient and future noise levels at the project site and compared with exterior and interior noise thresholds contained in the City's General Plan. The project would not result in any significant noise impacts. Additionally, the project is not of a type that would generate excessive noise to neighboring uses during daily operation. Noise associated with increased traffic as a result of the project would not increase levels above the significance threshold of 3 dBA CNEL. Therefore, the project is consistent with this goal.
Goal N-1, Policy N-1.1	Address the potential for excessive noise levels when making land use planning decisions in accordance with Table 7-3 Land Use Compatibility Noise Standards.	The noise study prepared for the project (Appendix O) analyzed noise impacts to and generated from implementation of the proposed project. As summarized in Section 3.11 (Noise), construction and operational noise impacts would be less than significant. The project is consistent with this policy.
Goal N-1, Policy N-1.2	Ensure that acceptable noise levels are maintained near noise-sensitive uses.	The noise study prepared for the project (Appendix O) analyzed noise impacts to and generated from implementation of the proposed project. As summarized in Section 3.11 (Noise), construction and operational noise impacts would be less

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		than significant. The project would not impact any adjacent noise-sensitive land uses. The project is consistent with this policy.
Goal N-1, Policy N-1.3/ Goal EJ-4, Policy EJ-4.11	Incorporate design features into residential land use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls, and sound attenuating architectural design and construction methods.	The project design includes rooftop parapets and shielding to minimize noise from HVAC equipment. The project design also includes balcony and patio shielding for units facing W. Mission Road to ensure private outdoor spaces do not have noise levels in excess of City standards. The project is consistent with this policy.
Goal N-1, Policy N-1.4	Require new development projects to provide barriers to reduce noise levels, or provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.	The project design includes rooftop parapets and shielding to minimize noise from HVAC equipment. The project design also includes balcony and patio shielding for units facing W. Mission Road to ensure private outdoor spaces do not have noise levels in excess of City standards. The project is consistent with this policy.
Goal N-1, Policy N-1.5	Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the Normally Acceptable levels identified in Table 7-3.	A noise study was prepared for the project (Appendix O) and summarized in Section 3.11, (Noise), of the EIR. Construction and operational noise impacts were determined to be less than significant. The project would not exceed the Normally Acceptable levels in Table 7-3. The project is consistent with this policy.
Goal N-2	Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.	A noise study was prepared for the project (Appendix O) and summarized in Section 3.11, (Noise), of the EIR. Construction and operational noise impacts were determined to be less than significant. The analysis considered the influence of adjacent roadway noise and the SPRINTER rail line. The project is consistent with this goal. The project is consistent with this policy.
Goal N-2, Policy N-2.1	Encourage only noise-compatible land uses along existing and future roadways, highways, and freeways.	A noise study was prepared for the project (Appendix O) and summarized in Section 3.11, (Noise), of the EIR. For residential units with line-of-site to W. Mission Road, private outdoor spaces would have enhanced balcony and patio shielding consisting of 5-foot barriers. The location where the enhanced shielding would be incorporated is shown on Figure 3.11-3.
Goal N-2, Policy N-2.2	Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.	A noise study was prepared for the project (Appendix O) and summarized in Section 3.11, (Noise), of the EIR. Construction and operational noise impacts were determined to be less than significant. The analysis considered the

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		influence of adjacent roadway noise and the SPRINTER rail line. The project is consistent with this policy.
Goal N-2, Policy N-2.3	Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-combustible engine vehicles to reduce traffic noise.	The project's internal pedestrian circulation network would connect to the existing sidewalk on W. Mission Road and to the future sidewalk on Capalina Road. The project is adjacent to an NCTD bus stop on W. Mission Road and is less than 0.6 mile from the SPRINTER rail station. The project design incorporate bicycle racks per the requirements of the City's CAP Checklist. The project is consistent with this policy.
Goal N-3	Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.	The nearest noise-sensitive land uses are the mobile homes located along Capalina Road. As analyzed in Section 3.11, (Noise), non-transportation-related noise impacts were determined to be less than significant. HVAC equipment would be shielded with parapets as part of the project design. The project is consistent with this goal.
Goal N-3, Policy N-3.1	When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.	The nearest noise-sensitive land uses are the mobile homes located along Capalina Road. As analyzed in Section 3.11, (Noise), all construction and operational impacts for the project would be less than significant. Construction activities would comply with the City's Municipal Code requirement and all construction activities would occur between 7:00 AM and 4:30 PM, Monday through Friday. Therefore, the project is consistent with this goal.
Goal N-3, Policy N-3.2	Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.	Construction activities would comply with the City's Municipal Code requirement and all construction activities would occur between 7:00 AM and 4:30 PM, Monday through Friday. No construction activities will occur on weekends or holidays. No construction-related noise impacts were identified for the project. The project is consistent with this policy.
Housing Element		
Goal H-1	Provide a broad range of housing opportunities with emphasis on providing housing which meets the special needs of the community.	The project would construct 119 residential apartments and six of the units would be affordable at the very low income level (50% of the AMI). The project proposes a mix of studio, one-bedroom, two-bedroom and three-bedroom units ranging from 600 s.f. to 1,030 s.f. The project is consistent with this goal.
Goal H-1, Policy 1.1/	Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and	The project would construct 119 residential apartments and six of the units would be affordable at the very low income level (50% of the AMI). The project proposes a mix of studio, one-bedroom, two-bedroom and three-bedroom units

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal EJ-4, Policy EJ-4.5	income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities.	ranging from 600 s.f. to 1,030 s.f. The project site is adjacent to an NCTD bus stop and near the SPRINTER rail line along W. Mission Road, which is a highly traveled transportation corridor. The project is consistent with this policy.
Goal H-2	Protect, encourage, and provide housing opportunities for persons of lower and moderate incomes.	The project would construct 119 residential apartments and six of the units would be affordable at the very low income level (50% of the AMI). The project is consistent with this policy.
Goal H-4, Policy 4.4	Balance the need to protect and preserve the natural environment with the need to provide additional housing and employment opportunities.	The project balances the provision of housing with the preservation of open space. The project would develop 119 residential apartments and 4,000 s.f. of commercial use. All impacts would be mitigated to below a level of significance. Additionally, Section 4.0, (Alternatives), of the EIR provides a range of alternative development scenarios, including a no development alternative, considered for the project site.

3.11Noise

Introduction

This section addresses the potential noise effects resulting from the construction of the project and analyzes the noise compatibility of the project site with surrounding land uses. The analysis is based on the following report, which is included as **Appendix O** of the Environmental Impact Report (EIR):[15]

- *Noise Assessment, Capalina Apartments Residential Development GPA22-0003, R22-0003, SDP22-0007* City of San Marcos, prepared by LDN Consulting, June 2023 (LDN 2023d)

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact resulting from excessive noise levels from being located within the vicinity of a private airstrip or within two miles of a public airport. Therefore, this issue is not discussed further in this section. Section 5.9, Environmental Effects Found Not to Be Significant – Noise of the EIR provides additional information on this topic.

Table 3.11-1 summarizes the project- and cumulative-level noise impacts, by threshold.

Table 3.11-1. Noise Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1 – Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.	Potentially Significant	Less than Significant	Mitigated to Less Than Significant
#2 - Generation of excessive groundborne vibration or groundborne noise levels.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.11.1 Existing Conditions

This section provides background on noise analysis and a description of the existing noise environment on the project site and surrounding area and details the results of the ambient noise monitoring conducted by LDN Consulting on October 11, 2022 between 11:00 AM and 11:15 AM.

Background

Noise

Noise is generally defined as "unwanted sound" that interferes with normal activities. Excessive levels of noise can cause hearing loss, although the principal human response to environmental noise is

[15] Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

annoyance. Noise is measured on a logarithmic scale of sound pressure level known as decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only frequencies audible to the human ear. Equivalent sound level (Leq) is the noise metric used to collect short-term noise level measurement samples. It represents a steady state sound level containing the same total energy as a time varying signal over a given sample period, with Lmax and Lmin as the maximum and minimum, respectively. Community receptors are more sensitive to unwanted noise intrusion during the evening and at night. State law requires that, for some planning purposes, an artificial dBA increment be added to quiet time noise levels in a 24-hour A-weighted average noise descriptor called the Community Noise Equivalent Level (CNEL). In general, a change of 10 dBA is perceived as twice as loud (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear), a 5 dBA change in community noise levels is clearly noticeable, and a 3 dBA change is the smallest increment that is perceivable by most people. Changes of 1 to 2 dBA are not usually detectable by the human ear.

The decibel level of a sound decreases (or attenuates) exponentially as the distance from the source of that sound increases. For a single point source, such as a piece of mechanical equipment, the sound level normally decreases by about 6 dBA for each doubling of distance from the source. Sound that originates from a linear, or "line" source, such as a heavily traveled traffic corridor, attenuates by approximately 3 dBA per doubling of distance, provided that the surrounding site conditions lack ground effects or obstacles that either scatter or reflect noise.

Surrounding site conditions, meteorological conditions, and the presence of manmade obstacles such as buildings and barriers may also reduce noise at the location of a receiver. For example, vegetation and loose soils may either absorb or scatter the sound from roadways, yielding sound attenuation rates in environments with these major ground effects that are as high as 4.5 dBA for each doubling of distance (compared to 3 dBA without major ground effects). In addition, barriers between a noise source and a receiver can substantially reduce noise levels at the receiver. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction. Taller barriers will provide increased noise reduction.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Human response to vibration is best approximated by the vibration velocity level.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration known as "structureborne/groundborne" vibration. Vibration in buildings is typically perceived as rattling of windows or items on shelves or the motion of building surfaces. The vibration of building surfaces can also be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings unless the receptors are in proximity to heavy equipment.

Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to rapidly decrease with distance away from the source. Soil properties also affect the propagation of vibration.

Man-made vibration issues are, therefore, usually confined to short distances from the source (i.e., 50 feet or less).

Vibration amplitudes are usually described in terms of peak levels, as in peak particle velocity (PPV) in inches/second that correlates best with human perception. The particle velocity is the velocity of the soil particles resulting from a disturbance. Agencies such as the California Department of Transportation (Caltrans) use the PPV descriptor because it correlates well with damage or complaints. Caltrans estimates that the threshold of perception is approximately 0.006 inches/second PPV and the level at which continuous vibration begins to annoy people is approximately 0.010 inches/second PPV (Caltrans 2020).

Existing Noise Environment

The project site is currently vacant and does not currently contain any sources of noise or vibration generation. The project site is located between W. Mission Road and Capalina Road. The project vicinity is developed with a mix of commercial, office and residential uses. Sources of noise in the surrounding area are primarily from traffic on W. Mission Road.

Existing ambient noise measurements were collected by LDN Consulting on October 11, 2022 along the northern boundary of the project site adjacent to W. Mission Road. Sound level meters mounted to tripods approximately five feet above the ground were used and measured sound for a period of 15 minutes. The monitoring location is shown in **Figure 3.11-1**.

The results of the noise level measurements are presented in **Table 3.11-2.** The measurements were taken on site to establish a baseline of the vehicle noise from W. Mission Road. The measurements were free of obstruction and had a direct line of sight to the roadways. As shown in Table 3.11-2, the overall sound level was found to be 66.9 dBA Leq.

Table 3.11-2. Measured Ambient Noise Levels

Measurement Identification	Description	Date/Time	Noise Levels (dBA Leq)					
			Leq	Lmax	Lmin	L10	L50	L90
ML 1	W. Mission Road	October 11, 2022 11:00 AM to 11:15 AM	66.9	79.6	43.2	70.7	62.4	48.0

Source: LDN 2023d.

3.11.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to noise, including federal, state, and local guidelines.

Federal

Federal Bodies

Title 49 Chapter 65 of the United States Code of Federal Regulations provides for the regulation of noise to protect the public health, safety, and welfare. The Federal Highway Administration (FHWA); Federal Rail Administration and Federal Transit Administration (FTA); and the Federal Aviation Administration, respectively, regulate roadway, rail, and aircraft.

Vibration and Groundborne Noise Impact Regulations

Publications of the FTA and Caltrans are two of the seminal works for the analysis of groundborne noise and vibration relating to transportation and construction-induced vibration. While the project is not subject to FTA or Caltrans regulations, these guidelines serve as a useful tool to evaluate vibration impacts. Caltrans guidelines recommend that a standard of 0.2 in/sec peak particle velocity (PPV) not be exceeded for the protection of normal residential buildings, and that 0.08 in/sec PPV not be exceeded for the protection of old or historically significant structures. With respect to human response within residential uses (i.e., annoyance, sleep disruption), FTA recommends a maximum acceptable vibration standard of 80 vibration velocity (VdB).

State

State noise standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulatory guidelines governing noise levels generated by individual motor vehicles and guidelines governing occupational noise control are not applicable to planning efforts nor are these areas typically subject to California Environmental Quality Act (CEQA) analysis.

Office of Planning and Research General Plan Guidelines

The State of California General Plan Guidelines, published by the Governor's Office of Planning and Research (OPR), provides guidance for the acceptability of specific land use types within areas of specific noise exposure. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. General Plan guidelines are advisory in nature. Local jurisdictions, including San Marcos, have the responsibility to set specific noise standards based on local conditions.

State of California Code of Regulations Title 24

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (Title 24, Part 2, California Code of Regulations). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL (or LDN) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or LDN) of at least 45 dBA [California's Title 24 Noise Standards, Chap. 2-35].

Local

City of San Marcos General Plan

The following are applicable goals and policies from the City of San Marcos General Plan, Noise Element:

- Goal N-1: Promote a pattern of land uses compatible with current and future noise levels.

  - Policy N-1.1: Address the potential for excessive noise levels when making land use planning decisions in accordance with Table 7-3 Land Use Compatibility Noise Standards.
  - Policy N-1.2: Ensure that acceptable noise levels are maintained near noise-sensitive uses.
  - Policy N-1.3: Incorporate design features into residential land use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls, and sound attenuating architectural design and construction methods.
  - Policy N-1.4: Require new development projects to provide barriers to reduce noise levels, or provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.
  - Policy N-1.5: Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the Normally Acceptable levels identified in Table 7-3.
- Goal N-2: Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.
  - Policy N-2.1: Encourage only noise-compatible land uses along existing and future roadways, highways, and freeways.
  - Policy N-2.2: Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.
  - Policy N-2.3: Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-combustible engine vehicles to reduce traffic noise.
- Goal N-3: Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.
  - Policy N-3.1: When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.
  - Policy N-3.2: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.

The following is an applicable goal and policy from the City of San Marcos General Plan, Safety Element:

- Goal S-7: Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.
  - Policy S-7.1: Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.

The following is an applicable goal and policy from the City of San Marcos General Plan, Environmental Justice Element:

- Goal EJ-4: Foster healthy living conditions for people of all backgrounds and incomes

- Policy EJ-4.11: Incorporate design features into residential use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls and sound attenuating architectural design and construction methods.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies.

City of San Marcos Municipal Code

Chapter 10.24 (Noise)

Chapter 10.24 of the San Marcos Municipal Code prohibits loud, annoying, or unnecessary noises. However, the Noise Ordinance does not specifically provide quantified property line noise level limits. Section 10.24.020 provides definitions for and examples of prohibited noise sources. Included in the list of prohibited noise sources is demolition and building construction activities that occur Monday through Friday before 7:00 AM and after 6:00 PM or on Saturdays before 8:00 AM or after 5:00 PM. The noise ordinance does not include a quantified noise level limit for construction noise. Section 10.24.030 describes the standards for how sound is assessed. Commonly, the City has utilized Section 36.409 the County of San Diego's Noise Ordinance noise limit of 75 dBA Leq (8-hour) for construction activities.

Section 17.32.180 (Grading Operation Restrictions)

City of San Marcos Municipal Code Section17.32.180 addresses the time limits that apply to grading, extraction, and blasting between 7:00 AM and 4:30 PM Monday through Friday. Grading, extraction, or related earth moving is not allowed in the City on the weekends or holidays. The Municipal Code does not set noise limits on construction activities. Commonly, the City has utilized the County of San Diego's Noise Ordinance noise limit of 75 dBA for construction activities.

The Noise Element of the County of San Diego General Plan establishes limitations on sound levels to be received by various land uses. New development may cause an existing noise sensitive land use (NSLU) to be affected by noise caused by the new development, or it may create or locate a NSLU in such a place that it is affected by noise. The Noise Element identifies airports and traffic on public roadways as the major sources of noise. The County Noise Element establishes the exterior noise level standards and provides interior standards and definitions. If the exterior noise level would exceed 75 dBA CNEL, new development would not be approved.

Chapter 20.300 (Zoning Ordinance)

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. Section 20.300, Performance Standards, within the Zoning Ordinance identifies noise regulations to prohibit unnecessary, excessive, and annoying noises. Table 20.300-4, included below as **Table 3.11-3** identifies allowable noise levels (dBA) by zone type. For multifamily residential and commercial uses, the allowable noise level, as measured at the property line is 65 dBA from 7:00 AM to 10:00 PM. and 55 dBA from 10:00 PM to 7:00 AM. Increases in allowable noise levels listed in Table 3.11-3 may be permitted in accordance with the standards outlined in **Table 3.11-4.**

1. Noise shall be measured with a sound-level meter that meets the standards of the American National Standards Institute (ANSI) (Section S1.4-1979, Type 1 or Type 2). Noise levels shall be measured in decibels at the property line of the receptor property, and at least five (5) feet

above the ground and ten (10) feet from the nearest structure or wall. The unit of measure shall be designated as an A-weighted decibel (dBA) Leq standard. A calibration check shall be made of the instrument at the time any noise measurement is made.

2. No person shall create or allow the creation of exterior noise that causes the noise level to exceed the noise standards established by Table 20.300-4 (shown as Table 3.11-3). Increases in allowable noise levels listed in Table 20.300-4 (shown as Table 3.11-3) may be permitted in accordance with the standards outlined in Table 20.300- 5 (shown as Table 3.11-4).
3. No person shall create nor allow the creation of noise that causes the interior noise level when measured within a dwelling unit to exceed forty-five (45) dBA at any time, except as permitted by Table 20.300-6 (shown as **Table 3.11-5**).
4. Use of compressors or other equipment, including vents, ducts, and conduits, but excluding window or wall-mounted air conditioners, that are located outside of the exterior walls of any building, shall be enclosed within a permanent, noncombustible, view-obscuring enclosure to ensure that the equipment does not emit noise in excess of the ANSI standards.

Table 3.11-3. Exterior Noise Standards by Zone

Zone	Allowable Noise Level (dBA Leq) Measured from the Property Line
Single-Family Residential (A, R-1, R-2)[1,2]	
7:00 AM and 10:00 PM (daytime)	60
10:00 PM and 7:00 AM (overnight)	50
Multifamily Residential (R-3) [(1)(2)]	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	55
Commercial (C, O-P, SR)[(3)]	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	55
Industrial	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	60

Source: City of San Marcos 2017 (Table 20.300-4)

Notes: (1) For single-family detached dwelling units, the "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet, (ii) for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10 percent of the lot area; (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.

(2) For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and

greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.
(3) For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.

Table 3.11-4. Permitted Increase in Noise Levels

Permitted Increase (dBA)	Duration (cumulative minutes per hour)
5	15
10	5
15	1
20	Less than 1 minute

Source: City of San Marcos 2017 (Table 20.300-5).

Table 3.11-5. Permitted Increase in Interior Noise Levels

Permitted Increase (dBA)	Duration (cumulative minutes per hour)
5	1
10	Less than 1 minute

Source: City of San Marcos 2017 (Table 20.300-6).

3.11.3 Thresholds of Significance

According to Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, noise impacts are considered potentially significant if they cause:

- Threshold #1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.
- Threshold #2: Generation of excessive groundborne vibration or groundborne noise levels.

The term "substantial increase" is not defined by any responsible agency. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dBA difference. Therefore, a threshold of 3 dBA is commonly used to define "substantial increase," as it is noticeable to humans under typical ambient conditions. For this analysis, a direct roadway noise impact would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment.

As identified above, impacts related to being in the vicinity of a private airstrip or airport land use plan are not discussed in this section. Section 5.9, Environmental Effects Found Not to Be Significant – Noise, provides additional information on this topic.

San Marcos Noise Impact Thresholds

Construction Noise Standards

The City of San Marcos Municipal Code does not set noise limits on construction activities. Commonly, the City utilizes the County of San Diego's Noise Ordinance Section 36.410 noise limit of 75 dBA at any existing sensitive receptor for construction activities. The Municipal Code Section 17.32.180 does address and limit grading and extraction activities between the hours of 7:00 AM and 4:30 PM, Monday through Friday, and no grading or earth moving activities are allowed on the weekends or holidays.

City of San Marcos Ground Vibration Standards

The City of San Marcos does not have adopted vibration criteria. The FTA provides criteria for acceptable levels of groundborne vibration for various types of buildings that are sensitive to vibration. For purposes of identifying potential project-related vibration impacts resulting from the proposed project, the FTA criteria will be used. **Table 3.11-6** shows the FTA groundborne vibration and noise impact criteria for human annoyance.

Table 3.11-6. Groundborne Vibration and Noise Impact Criteria (Human Annoyance)

	Groundborne Vibration Impact Levels (VdB re 1 microinch/second)			Groundborne Noise Impact Levels (dB re 20 micropascals)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]	N/A[4]	N/A[4]	N/A[4]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

Source: Federal Transit Administration , *Transit Noise and Vibration Impact Assessment,* September 2018.

1. "Frequent Events" are defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.
2. "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3. "Infrequent Events" are defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
5. Vibration-sensitive equipment is not sensitive to groundborne noise.

In addition to the vibration annoyance standards presented in Table 3.11-6, the FTA also applies the following standards for construction vibration damage. As shown in **Table 3.11-7**, structural damage is possible for typical residential construction when the PPV exceeds 0.2 inch per second (in/sec). This criterion is the threshold at which there is a risk of damage to normal dwellings.

Table 3.11-7. Groundborne Vibration Impact Criteria (Structural Damage)

Building Category		PPV (in/sec)	VdB
I.	Reinforced-concrete, steel, or timber (no plaster)	0.5	102
II.	Engineered concrete and masonry (no plaster)	0.3	98
III.	Non-engineered timber and masonry buildings	0.2	94
IV.	Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* September 2018.
Note: RMS = Root Mean Square (RMS) velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Transportation Noise Standards

To control transportation-related noise sources such as arterial roads, freeways, airports, and railroads, the City of San Marcos has established guidelines for acceptable community noise levels in the Noise Element of the General Plan (Table 7-3 of the General Plan Noise Element). For noise sensitive rural and single-family residential uses, schools, libraries, parks, and recreational areas, the City Noise Element requires an exterior noise level of less than 60 dBA CNEL for outdoor usable areas, such as yard and patio areas. For multi-family developments, the standard is 65 dBA CNEL. A standard of 70 dBA CNEL is typically applied to commercial uses. The City has also established an interior noise limit of 45 dBA CNEL for all residential uses. Noise sensitive indoor spaces are subject to compliance with CCR Title 24 noise insulation standards demonstrating a 45 dBA CNEL interior noise level with all windows of the structure closed.

Operational Noise Standards

The City noise regulations that apply to the proposed project are found in Chapter 20.300 Site Planning and General Development Standards of the City Municipal Code. These regulations aim to prohibit unnecessary, excessive, and annoying noises from all sources, as certain noise levels are detrimental to the health and welfare of individuals. The standards of this section and of Chapter 10.24 Noise of the Municipal Code apply to all land uses unless otherwise specified. No person shall create or allow the creation of exterior noise that causes the noise level to exceed the noise standards established by Table 20.300-4 of the Municipal Code. See Table 3.11-3 earlier in this section.

The City Ordinance limits noise generation in commercial/and multi-family zones to 65 dB Leq (one-hour average) between the hours of 7 am and 10 pm and 55 dB Leq between the hours of 10:00 PM and 7:00 AM as measured at the project property line as shown above in Table 3-3. Per the City of San Marcos General Plan Noise Element (GPNE), noise standards for commercial, multi-family, and mixed-use land uses are the same, and are higher than single-family residential areas because they reflect a more urban environment (GPNE, pg. 7-10). Higher thresholds are permitted due to the integrated mix of residential and commercial activity and their usual location near major arterials (GPNE, pg. 7-9). Properties directly surrounding the project site are all designated as commercial/mixed use under the City General Plan. The nearest residential use is the mobile home park located south across Capalina Road which is zoned multi-family. Therefore, the City Ordinance limits of 65 dBA hourly noise standard during the daytime hours between 7:00 AM and 10:00 PM. a 55 dBA standard during the nighttime hours between 10 p.m. and 7 a.m. would apply at all property lines.

3.11.4 Project Impact Analysis

Construction and operation of the project have the potential to result in short term and long term increases in noise on the project site in the project vicinity. As part of the project design, residential units with direct line-of-site to W. Mission Road would have enhanced balcony and patio shielding consisting of 5-foot barriers. The location where the enhanced shielding would be incorporated is shown on **Figure 3.11-3**. The shielding would be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials. Additionally, as part of the project design features, to ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Threshold #1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.

Construction Noise

This section addresses the construction noise impacts associated with the project to determine if they would result in the exposure of persons to or generation of noise level in excess of applicable noise standards. Construction noise represents a short-term impact on the ambient noise levels, primarily from construction equipment. Grading activities typically represent one of the highest potential sources for noise impacts. The most effective method of controlling construction noise is through local control of construction hours and by limiting the hours of construction to normal weekday working hours. As stated above, the City of San Marcos Municipal Code does not set noise limits on construction activities. Commonly, the City utilizes the County of San Diego's Noise Ordinance Section 36.410 noise limit of 75 dBA at any existing sensitive receptor for construction activities.

The U.S. Environmental Protection Agency (USEPA) has compiled data regarding the noise generating characteristics of specific types of construction equipment. Noise levels generated by heavy construction equipment can range from 60 dBA to in excess of 100 dBA when measured at 50 feet. However, these noise levels diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 75 dBA measured at 50 feet from the noise source to the receptor would be reduced to 69 dBA at 100 feet from the source to the receptor and reduced to 63 dBA at 200 feet from the source.

LDN used a point-source noise prediction model to calculate the expected construction noise impacts (LDN 2023d). The essential model input data for these performance equations include the source levels of each type of equipment, relative source to receiver horizontal and vertical separations, the amount of time the equipment is operating in a given day, also referred to as the duty-cycle and any transmission loss from topography or barriers.

The equipment needed for the most intensive grading activities would consist of a medium sized rubber tire tractor/backhoe, a large bulldozer, a medium sized front loader, a water truck, and a small to medium sized paver/blade. Based on the USEPA noise emissions, empirical data and the amount of equipment needed, worst case noise levels from the construction equipment for site preparation would occur during grading operations.

The potential noise sensitive uses are located adjacent or near the property lines. The affected land uses include the existing retail uses adjacent to the project to the east and west, and the existing residential uses across Capalina Road to the south over 100-feet from the proposed construction activities. W. Mission Road and the SPRINTER rail line are located to the north and are not considered sensitive uses. Existing ambient noise levels were determined to be 66.9 dBA Leq.

Grading

The grading activities would l consist of the preparation of internal roadways, parking, and the finished pads. No rock crushing or blasting are proposed as part of the grading activities. The equipment would be spread out over the project site from distances near the occupied property lines to distances of 200 feet or more away. Based upon the site plan, the majority of the grading operations, on average, would occur more than 100 feet from the property lines. This means that most of the time the average distance from all the equipment to the nearest property line is 100 feet.

As shown in **Table 3.11-8,** at an average distance of 100 feet from the construction activities to the nearest property line would result in a noise attenuation of 6.0 dBA without shielding. Given this, the noise levels would comply with the 75 dBA Leq (8-hour) standard at the property lines. Therefore, the construction noise impacts would be considered **less than significant** and no mitigation is required during construction of the proposed project. Additionally, all equipment should be properly fitted with mufflers and all staging and maintenance should be conducted as far away from the existing residence as possible.

Table 3.11-8. Construction Noise Levels

Equipment Type	Quantity Used	Source @ 50 Feet (dBA)	Cumulative Noise Level @ 50 Feet (dBA)
Tractor/Backhoe	1	72	72.0
Dozer D9 Cat	1	74	74.0
Loader/Grader	1	73	73.0
Water Truck	1	70	70.0
Paver/Blade	1	75	75.0
		Cumulative Level	80.1
		Distance to Sensitive Uses	100
		Noise Reduction due to Distance	-6.0
		Property Line Noise Level	**74.1**

Source: LDN 2023d.

Grading Materials Import

Grading of the project site would require 8,240 cubic yards of import. Noise level changes greater than 3 dBA are often identified as audible and considered potentially significant, while changes less than 1 dBA would not be discernible to local residents. In the range of 1 to 3 dBA, residents who are very sensitive to noise may perceive a slight change. Community noise exposures are typically over a long time period rather than the immediate comparison made in a laboratory situation. Therefore, the level at which changes in community noise levels become discernible is likely greater than 1 dBA, and 3

dBA appears to be appropriate for most people. For the purposes for this analysis, direct and cumulative roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if the project increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment. Typically, it requires a project to double (or add 100%) to the traffic volumes to result in a 3 dBA CNEL increase, which is considered a potential impact. Based on a current traffic volume of approximately 4,200 average daily traffic (ADT) or more on the roadways along the site and along the anticipated haul route, the additional trucks would add less than 0.5 dBA to the overall noise level. This is well below a 3 dBA increase that is considered a potential impact. Negligible noise impacts are anticipated at the residential uses that are located along the roadway due to the low volume of trucks. Impacts would be **less than significant.**

Operational Noise

This section addresses the operational noise associated with the project to determine if it would result in the exposure of persons to or generation of noise level in excess of applicable noise standards. Operational noise associated with the project would include traffic generated by the project that travels on area roadways as well as noise that is generated on the project site.

Future Onsite Roadway Noise

To determine the future noise environment and impact potential resulting from increased traffic associated with the proposed project, the FHWA model was utilized. The critical model input parameters, which determine the projected vehicular traffic noise levels, include vehicle travel speeds, the percentages of automobiles, medium trucks, and heavy trucks in the roadway volume, the site conditions, and the peak hour traffic volume. The peak hour traffic volumes range between six to 12 percent of the ADT and ten percent is generally acceptable for noise modeling.

Table 3.11-9 presents the roadway parameters used in the analysis including the peak traffic volumes, vehicle speeds, and the hourly traffic flow distribution (vehicle mix). The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA model. The Buildout conditions for W. Mission Road and Capalina Road include the future year 2050 traffic volume forecasts provided by the project traffic study (CRA 2023). In addition, the project site is located over 800 feet north of SR-78. According to the City of San Marcos General Plan Noise Element, background noise levels from the future traffic along SR-78 is 60 dBA CNEL at approximately 800 feet. The noise contours for this area would also include W. Mission Road and SPRINTER line noise.

Table 3.11-9. Future Traffic Parameters

Roadway	Average Daily Traffic (ADT)[1]	Peak Hour Volumes[1]	Modeled Speeds (MPH)	Vehicle Mix %[2]		
				Auto	Medium Trucks	Heavy Trucks
W. Mission Road	24,579	2,460	40	96	2	2
Capalina Road	5,174	517	35	96	2	2

Source: LDN 2023d.

Notes: Peak hour volumes are Year 2050 volumes identified in the Local Transportation Analysis prepared by CR Associates, 2023.
Typical City vehicle mix.

The required coordinate information necessary for the FHWA model input was taken from the conceptual site plans prepared by Summa Architecture (2023). The conceptual plans were used to identify the pad elevations, roadway elevations, and the relationship between the noise source(s) and the outdoor receptor areas. The modeled observer locations for the outdoor use areas are shown in Figure 3.11-2.

The modeling results for the future unmitigated exterior noise levels is shown in Table 3.11-10, including any noise reduction from the distance between the source and receptor. Based upon these findings, noise levels at ground floor patios and upper floor balconies along W. Mission Road would exceed the City Noise Standard of 65 dBA CNEL if design features were not included.

Table 3.11-10. Future Unmitigated Exterior Noise Levels

Traffic Volumes, Mix and Speeds

	Autos	Med. Trucks	Heavy Trucks
Mix Ratio by Percent	96.0	2.0	2.0
Propagation Rule	Hard		

Roadway	ADT	Speed MPH	Distance	CNEL
Mission Road	24,579	40	50	72.0
Capalina Road	5,174	35	50	64.0
SR-78			800	60.0
Sprinter			130	65.0

Noise Reduction due to Distance

Receptor 1

	Distance	Reduction	Resultant Level
Mission Road	60	-0.79	71.2
Sprinter	135	-0.16	64.8
Cumulative Noise Level			**72.1**

Receptor 2

	Distance	Reduction	Resultant Level
Capalina Road	55	-0.41	63.6
SR-78	890	-0.46	59.5
Cumulative Noise Level			**65.0**

Common Area

	Distance	Reduction	Resultant Level
Mission Road	200	-6.02	66.0
Capalina Road	120	-3.80	60.2
SR-78	990	-0.93	59.1
Sprinter	290	-3.48	61.5
Cumulative Noise Level			**68.6**

Source: *LDN 2023d.*

As discussed earlier in this section, as part of the project design, residential units with direct line-of-site to W. Mission Road would have enhanced balcony and patio shielding consisting of 5-foot barriers.

The shielding would be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials. **Table 3.11-11** shows that with incorporation of these design features, the sound level at the building façade facing W. Mission Road would not exceed 65 dBA CNEL and the impact would be **less than significant.**

Table 3.11-11. Future Exterior Noise Levels with Balcony and Patio Design Features

Receptor Number(1)	Receptor Location	Noise Level @ Receptor (dBA CNEL)(2)	Reduction Due to Shielding (dBA CNEL)	Resultant Noise Level (dBA CNEL)
1	Building Facades along W. Mission Road	72.1	-7.7	64.4
2	Building Facades along Capalina Road	65.0	-	65.0
3	Park/Outdoor Areas	68.6	-5.0	63.6

Source: LDN 2023d.
Notes: See Figure 3.11-2
FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108

Additionally, as part of the project design features described in Table 2-1, to ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Project Related Offsite Transportation Noise

To determine if direct or cumulative off-site noise level increases associated with the development of the proposed project would create noise impacts, the traffic volumes for the existing conditions were compared with the traffic volume increase of existing plus the proposed project. According to the project traffic study, the project is estimated to only generate 874 daily trips with a peak hour volume of 80 trips (CRA 2023). The existing traffic volumes on W. Mission Road is 24,579 ADT and 5,147 ADT on Capalina Road. Typically, it requires a project to double (or add 100%) the traffic volumes to have a direct impact of 3 dBA CNEL or be a major contributor to the cumulative traffic volumes. The project would add less than a 10% increase to W. Mission Road and Capalina Road volumes. Therefore, no direct or cumulative impacts are anticipated. Impacts would be **less than significant**.

Operational Noise – HVAC Equipment

This section examines the potential operational noise source levels associated with the development and operation of the proposed project. Noise from a fixed or point source drops off at a rate of 6 dBA for each doubling of distance; for example, a noise level of 70 dBA at 5 feet would be 64 dBA at 10 feet and 58 dBA at 20 feet. A review of the proposed project indicates that noise sources such as the roof mounted mechanical heating, ventilation, and air conditioning (HVAC) system are the primary source of stationary noise.

Properties directly surrounding the project site are designated as commercial/mixed use under the City General Plan. The nearest residential use is the mobile home park located south across Capalina Road, which is zoned R-MHP and has the same noise threshold as multi-family. Therefore, the City Ordinance limits of a 65 dBA hourly noise standard during the daytime hours between 7 a.m. and 10

p.m., a 55 dBA standard during the nighttime hours between 10 p.m. and 7 a.m. would apply at all property lines.

Roof-mounted HVAC would be installed at the proposed buildings. The project anticipates installing Carrier CA15NA (Series, 24-A) or equivalent HVAC units with a reference noise level of 71 dBA at 3-feet (Source: Carrier). The manufacturer's specifications and noise levels are provided in Attachment B of Appendix O of this EIR. The HVAC units would cycle on and off throughout the day. Typically, HVAC units run for approximately 20 minutes each operating cycle to provide the necessary heating or cooling. It is anticipated that the HVAC units would operate twice in any given hour or run for 40 minutes in any given hour. Noise levels drop 3 decibels each time the duration of the source is reduced in half.

Therefore, hourly HVAC noise level over a 40-minute period would be reduced approximately 2 decibels to 69 dBA based on operational time. To predict the property line noise level, a reference noise level of 69 dBA at 3-feet was used to represent the HVAC units.

The HVAC units are located a minimum of 160 feet from the residential property lines and would be shielded by the parapet walls that would break the line of sight to the HVAC units and would provide a minimum 5 dBA reduction. The typical locations of the proposed HVAC units are shown in **Figure 3.11-4**. Up to 15 units would be clustered together closest to the nearest residential property line to the south. The remainder of the units are separated by at least 80 feet and this separation would result in a 20 dBA difference between other HVAC clusters and would not cumulatively increase the noise levels. Therefore, the worst-case combined noise from the HVAC would occur from 15 units.

Utilizing a 6 dBA decrease per doubling of distance, noise levels at the nearest residential property line as described above were calculated for the HVAC. The HVAC units are located a minimum of 160 feet from the nearest residential property lines. The noise level reductions due to distance and the building for the nearest property line is provided in **Table 3.11-12** below.

Table 3.11-12. Project HVAC Noise Levels (Southern Residential Property Line)

Distance to Nearest Observer Location (Feet)	Hourly Reference Noise Level (dBA)	Noise Source Reference Distance (Feet)	Noise Reduction Due to Distance (dBA)	Reduction Due to Buildings (dBA)	Noise Level at Property Line (dBA)	Quantity	Property Line Cumulative Noise Level (dBA)(1)
160	69.0	3.0	-34.5	-5.0	29.5	15	**41.2**

Source: LDN 2023d.
Note: (1) Complies with the nighttime noise standard of 55 dBA.

Additionally, the noise levels at the nearest retail uses adjacent to the project to the west were analyzed using the same methodology described above. Up to 20 units would l be clustered closest to the western property line and would be separated by the remaining HVAC units by parapet walls and distance. Based on the distance to the property line to the west, noise associated with the operation of the HVAC units are expected to be 46.0 dBA or lower, which is below the 55 dBA nighttime threshold for commercial uses.

The noise levels from the proposed roof-mounted HVAC would be considered **less than significant** at the residential property line to the south and the commercial lines to the west and east with the proposed parapet walls and are in compliance with the City of San Marcos Municipal Code Section 10.24.

In summary, the proposed project would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.

Threshold #2: Generation of excessive groundborne vibration or groundborne noise levels.

This section analyzes the potential for the project to expose a person to or generation of excessive vibration or groundborne noise. Proposed residential uses would not be characterized as creating excessive vibration during project operation. The noise modeling is based upon project construction details and schedule provided by the project applicant.

The nearest vibration-sensitive uses are the existing mobile homes to the south located 100 feet or more from the center of the proposed construction. **Table 3.11-13** lists the average vibration levels that would be experienced at the nearest vibration sensitive land uses from the temporary construction activities.

Table 3.11-13. Vibration Levels from Construction Activities (Residential Receptors)

Equipment	Approximate Velocity Level at 25 Feet (VdB)	Approximate PPV Level at 25 Feet (in/sec)	Approximate Velocity Level at 100 Feet (VdB)	Approximate PPV Level at 100 Feet (in/sec)
Large bulldozer	87	0.089	68.9	0.0111
Backhoe Ram	87	0.089	68.9	0.0111
Jackhammer	79	0.035	60.9	0.0044
Loaded Trucks	86	0.076	67.9	0.0095
		FTA Criteria	80	0.2
		Significant Impact?	**No**	**No**

Source: LDN 2023d.

[1] PPV at Distance D = PPVref x (25/D)$^{1.5}$

The FTA has determined vibration levels that would cause annoyance to a substantial number of people and potential damage to building structures. The FTA criterion for vibration induced structural damage is 0.20 in/sec for the peak particle velocity (PPV). Project construction activities would result in PPV levels below the FTA's criteria for vibration induced structural damage. Therefore, project construction activities would not result in vibration induced structural damage to residential buildings near the construction areas. The FTA criterion for infrequent vibration induced annoyance is 80 Vibration Velocity (VdB) for residential uses. Construction activities would generate levels of vibration that would not exceed the FTA criteria for nuisance for nearby residential uses. Vibration impacts would be **less than significant.**

3.11.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in

an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to noise, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative noise impacts.

Cumulative construction noise could occur if there are other project under construction in the vicinity of the proposed project. Based upon the location of the project and the timing for development and location of the cumulative project included in Table 2-3, a cumulative noise impact is not anticipated and impacts would be less than significant.

As discussed above, future traffic noise levels were analyzed comparing existing traffic with existing plus proposed project traffic levels. This analysis accounts for reasonably foreseeable cumulative traffic levels in the vicinity of the project. As discussed previously, impacts would be **less than significant.**

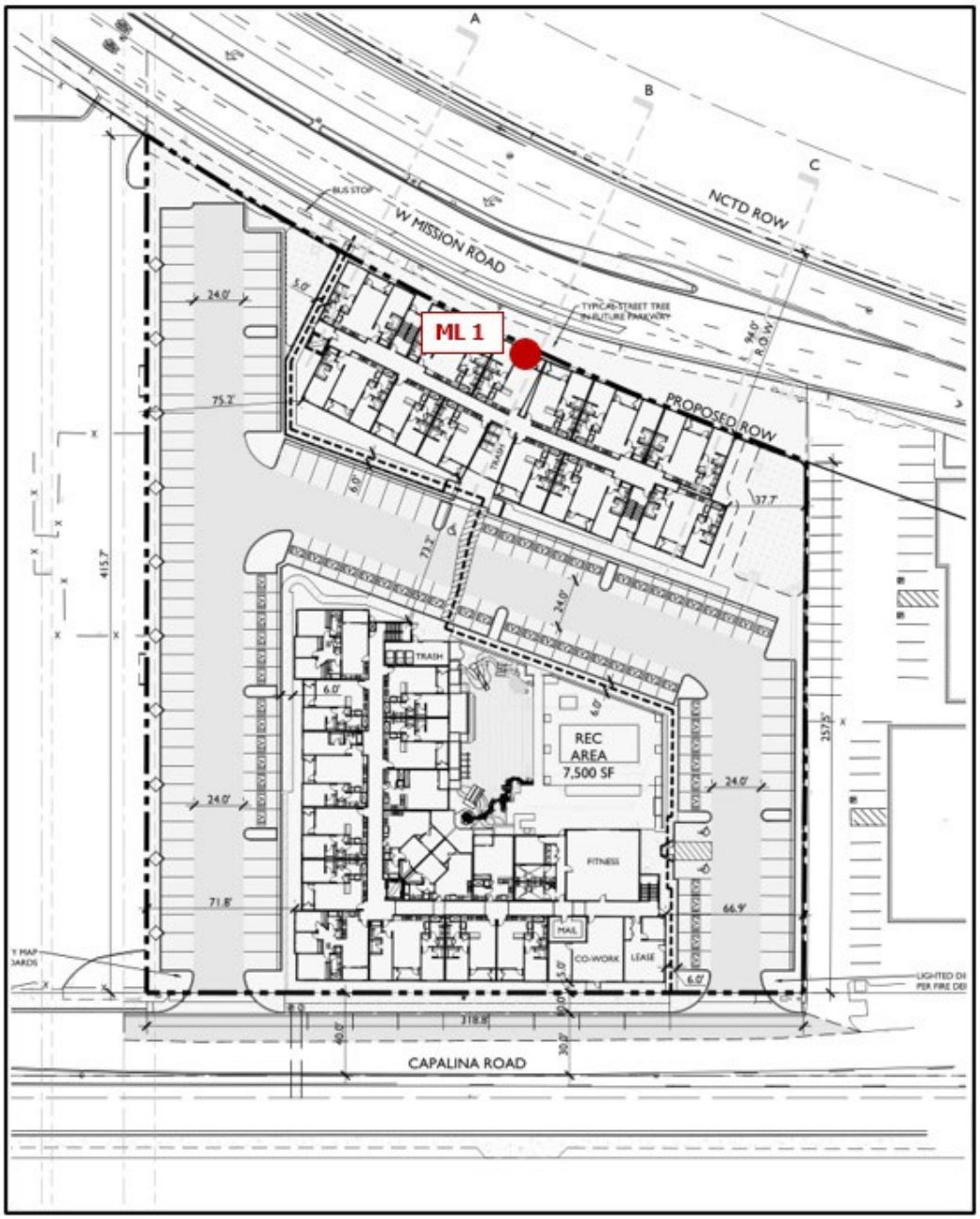
3.11.6 Mitigation Measures

Based upon the analysis presented in Sections 3.11.4 and 3.11.5, the project would not have any significant impacts and no mitigation measures are required.

3.11.7 Conclusion

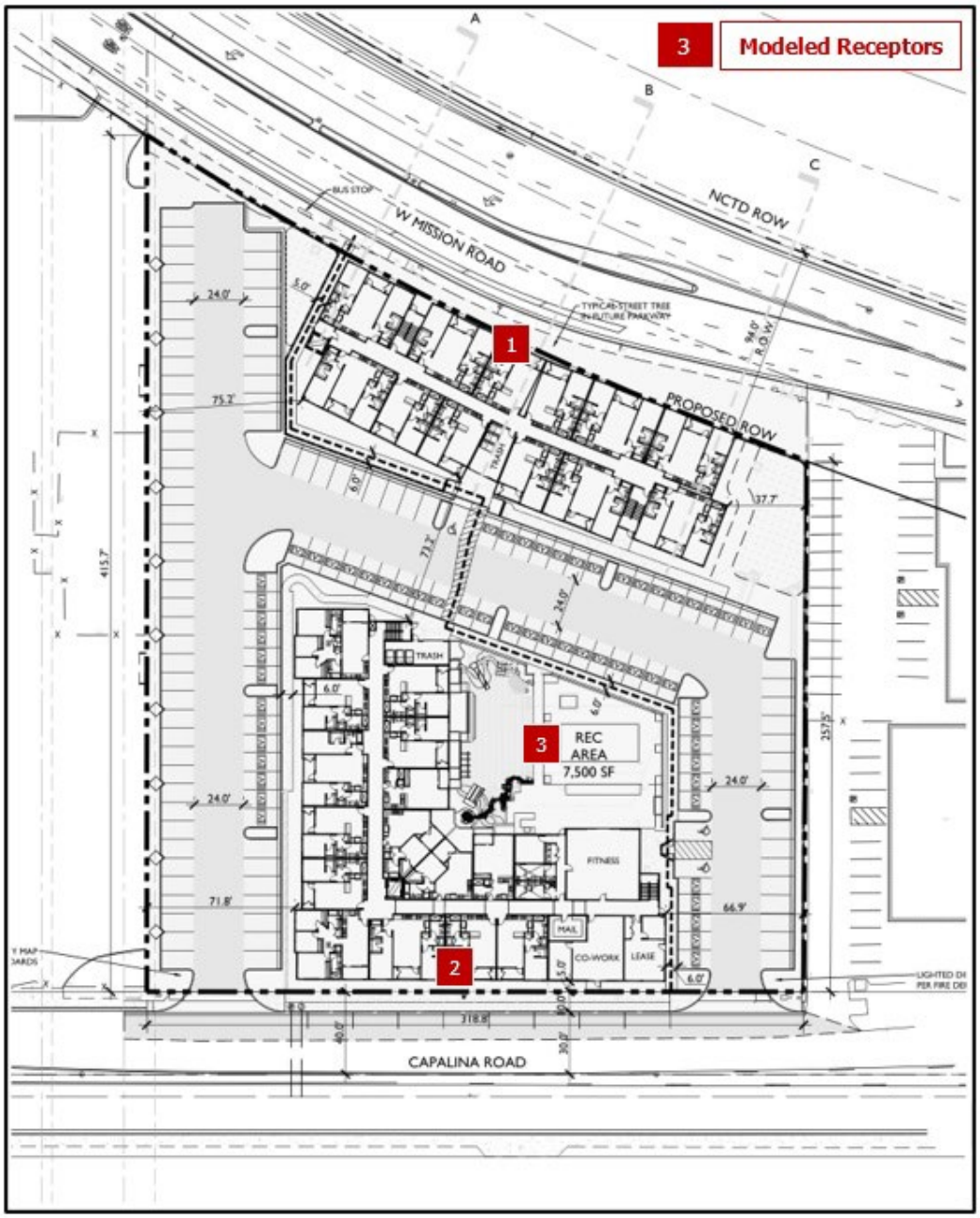
Proposed grading and construction activities would not exceed the 75 dBA (8-hour) threshold and impacts associated with construction and grading would be less than significant. Operational noise impacts at the project site would not exceed the City's General Plan Noise Element 65 dBA exterior noise threshold. As part of the project design, residential units with direct line-of-site to W. Mission Road would have enhanced balcony and patio shielding consisting of 5-foot barriers. The location where the enhanced shielding would be incorporated is shown on Figure 3.11-3. Construction activities would generate levels of vibration that would not exceed the FTA criteria for nuisance for nearby residential uses. Vibration impacts would be less than significant.

Figure 3.11-1. Ambient Monitoring Locations



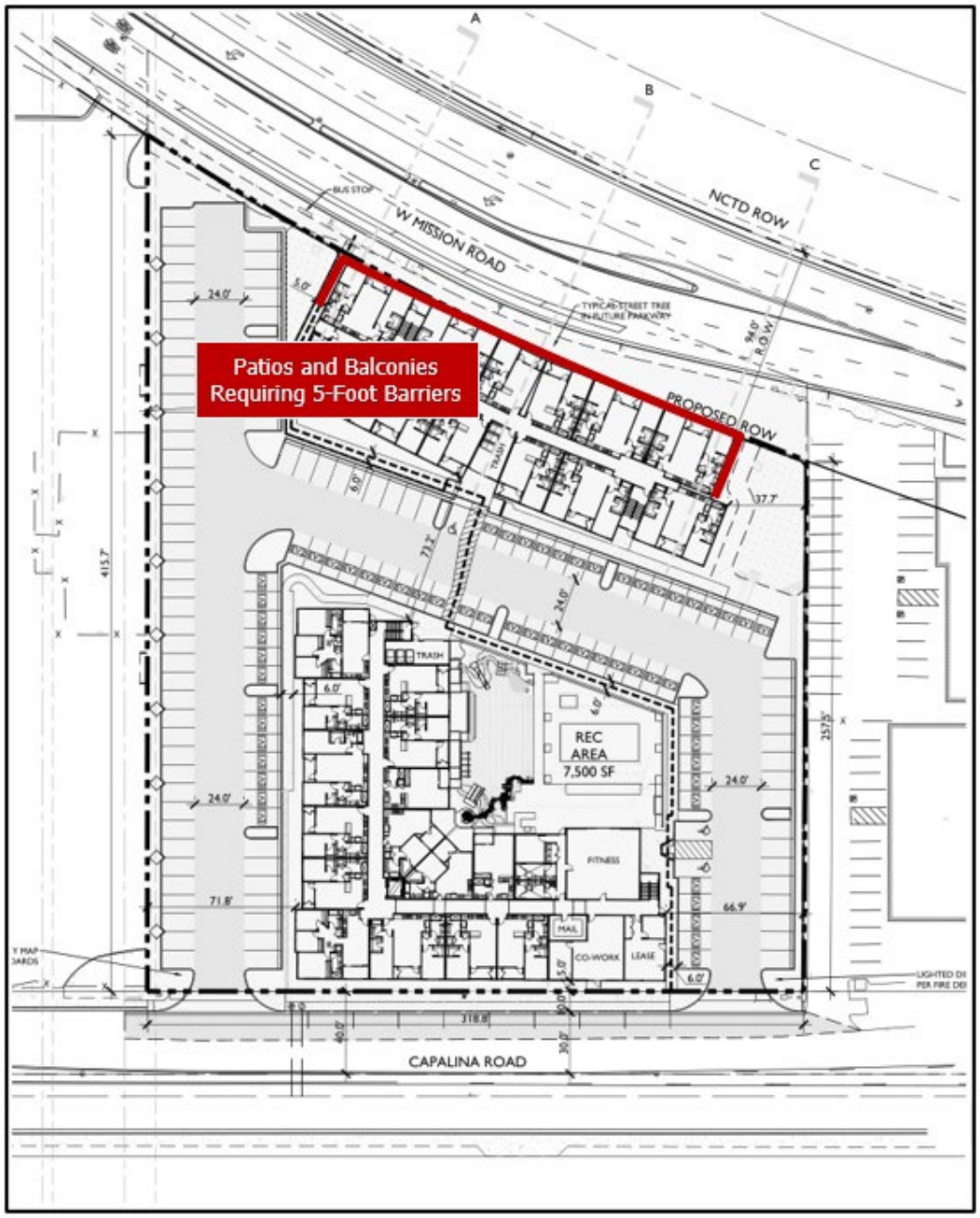
Source: LDN 2023d.

Figure 3.11-2. Modeled Receptor Locations



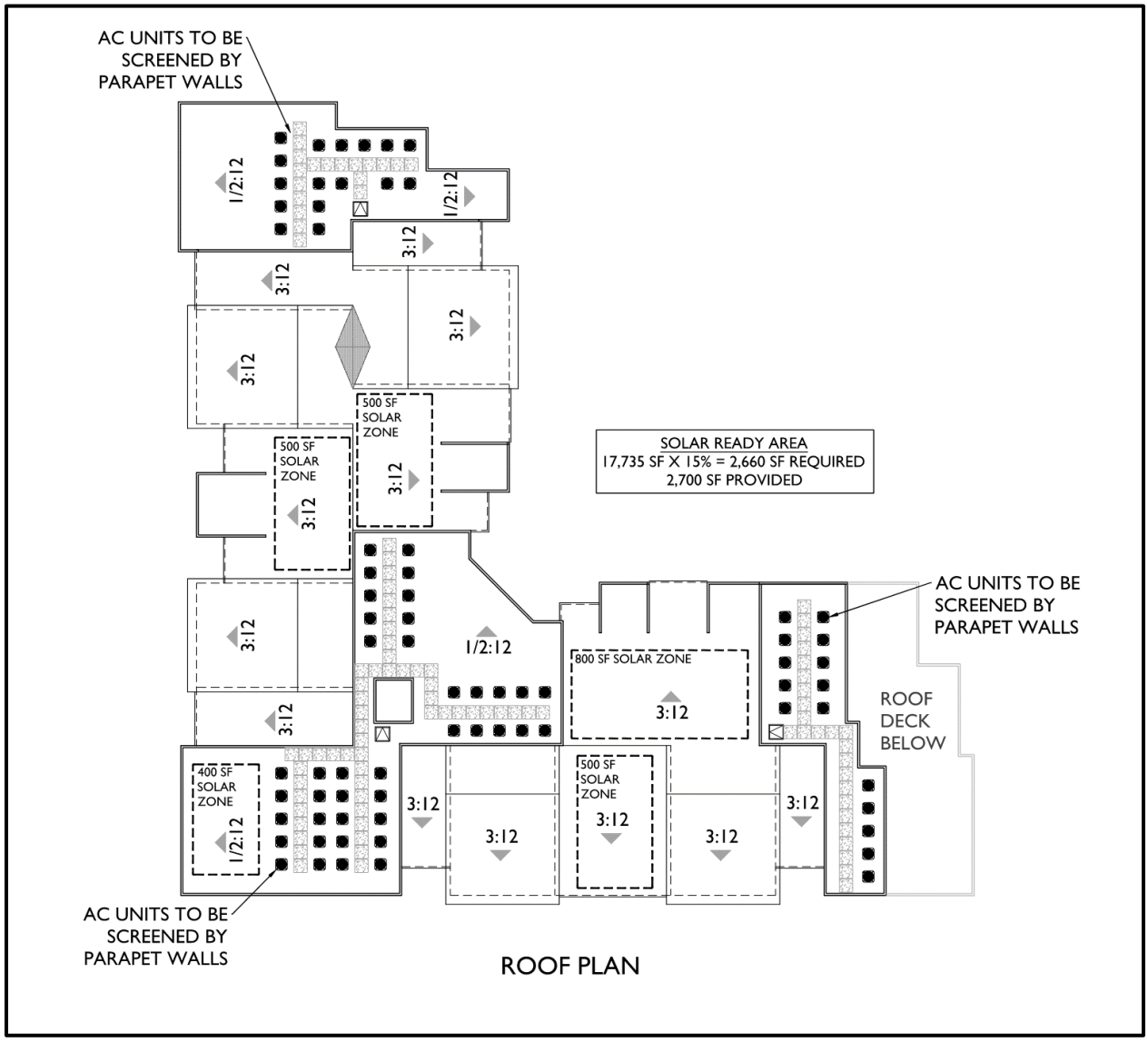
Source: LDN 2023d.

Figure 3.11-3. Area of Enhanced Shielding on Patios and Balconies



Source: LDN 2023d.

Figure 3.11-4. Locations of Proposed HVAC Units



Source: LDN 2023d.

3.12 Population and Housing

This section analyzes the potential for impacts related to population and housing resulting from development of the proposed project. This section considers population and housing characteristics in the area and discusses project consistency with regional growth projections.

In the Initial Study prepared for the proposed project (**Appendix B.1**), implementation of the proposed project was determined to have no impacts related to the displacement of housing or people. There is no existing housing on the project site and the site is vacant. The construction of the proposed project would not displace a substantial number of existing homes, necessitating the construction of replacement housing elsewhere, nor would it displace a substantial number of people. This issue is not discussed further in this section. Section 5.10, Environmental Effects Found Not to Be Significant – Population and Housing, of the Environmental Impact Report (EIR) provides additional information on this topic.

Table 3.12-1 summarizes the project- and cumulative-impact analysis by threshold for the proposed project.

Table 3.12-1. Population/Housing Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
• Threshold #1: Induce substantial unplanned population growth in an area, either directly (for example by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.12.1 Existing Conditions

This section provides background information regarding population and housing forecasts for the City of San Marcos based upon demographic information from the San Diego Association of Governments (SANDAG).

Population

As of January 1, 2022, the California Department of Finance (DOF) estimates the population of the City is 93,585 (DOF 2022). Based on growth projections provided by the Series 14: 2050 Regional Growth Forecast prepared by SANDAG, it is estimated that the City's population growth will reach 104,365 persons by 2035, and 119,098 persons by 2050 (SANDAG 2022).

Housing

As of January 1, 2022, the City of San Marcos had 32,000 housing units. The housing stock is comprised of approximately 58.7 percent single-family detached and attached units, and approximately 31 percent multi-family units. Approximately 10.2 percent of the housing stock as of

January 2022 consisted of mobile homes (DOF 2022). Based on the Series 14: 2050 Regional Growth Forecast, the city is expected to have 42,050 housing units by 2050 (SANDAG 2022).

3.12.2 Regulatory Setting

This section describes the local regulatory setting as it relates to population and housing for the proposed project.

State

California Planning and Zoning Law

The legal framework within which California counties and cities exercise local planning and land use functions is provided in the California Planning and Zoning Law (Sections 65000 through 66499.58 of the California Government Code). Under that law, each county and city must adopt a comprehensive, long-term general plan. The law gives counties and cities wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. The requirements include seven mandatory elements described in the Government Code. Each element must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and implementation measures.

Once the general plan of a county or city is adopted, it should be construed as a dynamic document, for which adaptability is a key component. Each jurisdiction frequently reviews its general plan for consistency and to ensure it addresses growth-related issues in a comprehensive manner. State law allows up to four general plan amendments per general plan element per year, so each jurisdiction can make changes as justified.

Senate Bill 375

Senate Bill 375 (codified in the Government Code and Public Resources Code), took effect in 2008 and provides a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the greenhouse gas (GHG) reduction goals established in Assembly Bill 32. Senate Bill 375 requires metropolitan planning organizations to incorporate a Sustainable Communities Strategy (SCS) in their Regional Transportation Plans (RTPs) that will achieve GHG emissions reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

Regional Housing Needs Allocation

A Regional Housing Needs Allocation (RHNA) is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. Communities use the RHNA in land use planning, prioritizing local resource allocation, and deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promotes transportation mobility, and address social equity and fair share housing needs.

Regional

San Diego Association of Governments

SANDAG is a public agency, composed of 18 cities and the County of San Diego, which builds strategic plans guiding the San Diego region in land use, growth, economics, and the environment. SANDAG also provides population and housing estimates for the region, which are based, in part, on local jurisdictional planning data and inform regional planning.

The SANDAG Regional Comprehensive Plan, adopted in 2004, provides a long-term planning framework for the San Diego region (SANDAG 2004). The Regional Comprehensive Plan identified smart growth and sustainable development as important strategies to direct the region's future growth toward compact, mixed-use development in urbanized communities that already have existing and planned infrastructure, and then connecting those communities with a variety of transportation choices.

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

San Diego Forward: The 2021 Regional Plan

SANDAG is required by law to update its regional transportation plan every 4 years. In December 2021, SANDAG adopted the most recent update to its RTP/SCS. SANDAG's 2021 RTP/SCS, known as San Diego Forward: The 2021 Regional Plan (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 is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies. Because the Regional Plan combines the RTP, SCS and Regional Comprehensive Plan, it must comply with specific state and federal mandates that achieves GHG emission reduction targets set by the CARB; compliance with federal civil rights requirements (Title VI); and environmental justice considerations, air quality conformity, and a public participation process.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan removing the regional road usage charge. In developing the amendment, SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's GHG emissions target set by the CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. The draft amendment was released for public review and comment in June 2023.

The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing

land use planning of the City and other jurisdictions. For example, the City's General Plan, and other local General Plans of cities, may change based on General Plan amendments initiated by the jurisdiction or landowner applicants. The General Plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS latest forecasts of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

The project site is located within the SM-7 Mixed Use Transit Corridor as identified in SANDAG Smart Growth Concept Map for North County. The project applicant will utilize the State Density Bonus Program and 5% of the units will be affordable housing units, as defined under the State Density Bonus Law, California Government Code (Section 65915 – 65918) as enacted by California Assembly Bill No. 2345 (State Density Bonus). The Density Bonus Law allows for parking reductions and, in addition, the allowance of "incentives" or "concessions" from the local jurisdiction to assist with the construction and economic viability of the project.

Regional Growth Forecast

SANDAG estimates future population, housing, land use, and economic growth throughout San Diego County and its comprising cities, including the City of San Marcos. In August 2022, SANDAG accepted the Series 14: 2050 Regional Growth Forecast. This forecast serves as the foundation for San Diego Forward: The 2021 Regional Plan and other planning documents across the region. SANDAG growth projections for the region and for the City of San Marcos are outlined in **Table 3.12-2** below.

Table 3.12-2. Forecasted Growth for the San Diego Region and the City of San Marcos

Jurisdiction	Year				Change 2016-2050	
	2016	2025	2035	2050	Numeric	Percent
Population						
San Diego Region	3,309,510	3,470,838	3,620,329	3,746,054	436,544	13.2%
City of San Marcos	94,258	101,707	104,365	119,098	24,840	26.4%
Housing Units						
San Diego Region	1,190,555	1,288,207	1,409,853	1,471,286	280,371	23.6
City of San Marcos	30,539	34,250	36,113	42,050	11,511	37.7%
Employment						
San Diego Region	1,629,948	1,788,970	1,935,565	2,094,017	464.069	28.5%
City of San Marcos	41,096	45,786	51,523	63,031	21,935	53.4%

Source: SANDAG 2022 Series 14: 2050 Regional Growth Forecast.

The City of San Marcos is expected to experience a higher growth rate for population, housing, and employment when compared to the entire region of San Diego. It should also be noted that the 2050 Regional Growth Forecast is not intended to be an exact formula utilized to determine growth in the region and comprising jurisdictions; rather it should be utilized as a starting point for regional planning.

Regional Housing Needs Allocation

Based on a methodology that weighs a number of factors (i.e., projected population growth, employment, commute patterns, and available sites), SANDAG determined quantifiable needs for housing units in the region according to various income categories. In its final RHNA figures, SANDAG allocated 3,116 housing units to the San Marcos area for the 2021– 2029 RHNA period. After credits for constructed units (546) and approved units (1,039) are taken into consideration, the City has a remaining 2021-2029 RHNA of 1,585, including 640 extremely/very low-income, 475 low-income, and 414 above moderate-income units (City of San Marcos 2021).

Local

City of San Marcos General Plan

The City's Housing Element identifies three goals and associated policies that pertain to population and housing:

- Goal H-1: Provide a broad range of housing opportunities with emphasis on providing housing which meets the special needs of the community.
    - Policy 1.1: Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities.
- Goal H-2: Protect, encourage, and provide housing opportunities for persons of lower and moderate incomes.
- Goal H-4: Reduce or remove governmental constraints to the development, improvement, and maintenance of housing where feasible and legally permissible.
    - Policy 4.4: Balance the need to protect and preserve the natural environment with the need to provide additional housing and employment opportunities.

The following goal and policy from the City of San Marcos General Plan, Environmental Justice Element pertain to population and housing:

- Goal EJ-4: Foster healthy living conditions for people of all backgrounds
    - Policy 1.1: Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities (See Housing Policy 1.1).

The proposed project's consistency with applicable General Plan goals and policies is discussed in Table 3.10-7 in Section 3.10, Land Use and Planning, of this EIR. As detailed in Section 3.10.4, the project is consistent with the applicable goals and policies pertaining to population and housing.

The City adopted its 2021-29 Housing Element on July 13, 2021. According to the 2021-29 Housing Element, the City had already constructed approximately 50 percent (approximately 1,585 units) of its RHNA allocation of 3,116 units with housing units constructed, under construction, or approved. Based on a residential sites inventory assessment, the City has the ability to adequately accommodate the remaining RHNA requirements within land that currently permits residential development

(comprised of proposed applications, vacant residential sites, and vacant land in Specific Plan Areas). The project site is not identified within the City's 2021-29 Housing Element inventory assessment as a site that could contribute to the RHNA allocation (City of San Marcos 2021).

3.12.3 Thresholds of Significance

Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* provides thresholds for determining significant environmental impacts. A project may be deemed to have a significant impact to population and housing if it would:

- **Threshold #1:** Induce substantial unplanned population growth in an area, either directly (for example by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

3.12.4 Project Impact Analysis

Threshold #1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).

Increases in population, housing, and employment are generally considered to be social or economic effects, as opposed to physical effects, which are the focus of CEQA analysis. There are circumstances where social and economic changes could indirectly cause physical environmental impacts or result in changes to environmental resources, such as air quality, traffic, or noise levels. In other situations, lead agencies may evaluate social or economic change related to a physical change in determining whether the physical change is significant (CEQA Guidelines Section 15131).

The approximately 2.51-acre-project site is located entirely within the City of San Marcos. A General Plan Amendment is required to re-designate the project site from Mixed-Use 3 (MU3) to Mixed-Use 2 (MU2). A rezone is also required to re-designate the project site from Mixed Use 3 (SP) to Mixed Use 2 (MU2). The General Plan Amendment and Rezone would allow the project to build 119 multi-family residential units and 4,000 s.f. of commercial use on the site. Six of the units would be affordable at the very low-income level (50% of the Area Median Income or AMI).

Construction of the proposed project would result in a temporary increase in construction employment. Given the relatively common nature and scale of the construction associated with the proposed project, the demand for construction employment would likely be met within the existing and future labor market in the City and North County San Diego area. The size of the construction workforce would vary during the different stages of construction, but a substantial quantity of workers from outside the local area would not be expected to relocate permanently. Therefore, project construction would result in a less than significant impact related to population and employment growth.

The proposed project would directly induce growth through the development of 119 multi-family residential dwelling units. Based on the City's population rate of 3.1 persons per dwelling unit, the proposed project would directly induce population growth to the area and would potentially add an estimated 369 people to the area. The proposed project would not, however, indirectly induce a growth in population as no extension of infrastructure is proposed beyond what is required to adequately serve the proposed project. The SANDAG population growth forecasts rely, in part, on individual jurisdiction's planning documents, such as the City's General Plan. Because the project proposes a General Plan Amendment and Rezone, the estimated population of 369 people would not have been accounted for in SANDAG's projections. Therefore, the project's induced population would exceed

these projections. However, determination of impacts related to population growth are based upon whether the induced growth would be considered substantial.

The future commercial uses are anticipate to have approximately four employees. It is expected that these employees would come from the local job market and would not require workers to relocate from outside the area. The proposed commercial use would not induce population growth.

As shown in Table 3.12-2 above, the City's population is projected to grow from 94,258 people in 2016 to 104,365 people by 2035 (an increase of 10,107 people). The population increase of 369 people would account for 3.7% of SANDAG's projected population growth.

There is no hardline number or percentage available to determine whether or not this estimated introduction of 369 people (3.7% of projected growth) could be considered a substantial increase in population. However, SANDAG's 2050 Regional Growth Forecast is intended to be used as a starting point for regional planning as opposed to a prescribed growth pattern. Although the City determined that there are adequate sites available with appropriate designations/zoning to accommodate the remaining RHNA allocation for the current Housing Element planning period, the City has the discretion to adjust allocated housing units/sites as necessary to balance proposed plans for residential development with approved/constructed residential development (City of San Marcos 2021). Therefore, while the proposed project would directly induce growth beyond current estimates and forecasts, it would not be considered substantially growth inducing, and impacts would be **less than significant**.

3.12.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect.

The cumulative projects are listed in Table 2-3, and include single-family residential and multi-family (affordable and market rate). In addition, commercial, industrial, and institutional developments are proposed or approved. Collectively, the cumulative projects in Table 2-3 include 2,373 residential units, approximately 307,000 s.f. of commercial/industrial/institutional use and 122 hotel rooms. When the proposed project is added into these totals it would be 2,492 residential units and approximately 311,000 s.f. of commercial/industrial/institutional use and 122 hotel rooms. These cumulative projects have the potential to either directly or indirectly induce population growth through development of new housing units and new employment opportunities. It is important to note that the introduction of new residential units and the associated population is not, in and of itself, a significant impact.

As discussed above, SANDAG determined quantifiable needs for housing units in the region according to various income categories. In its final RHNA figures, SANDAG allocated 3,116 housing units to the San Marcos area for the 2021– 2029 RHNA period. After credits for constructed and approved units the City has a remaining 2021-2029 RHNA of 1,585 units. The development of the proposed project and the cumulative projects would assist the City in meeting its RHNA goals, including goals for affordable housing. Additionally, for the longer term as shown in Table 3.12-2, SANDAG has forecasted

an increase of population (26.4% increase), housing (37.7% increase) and employment (53.4% increase) for the City from 2016 to 2050. The growth associated with the proposed project and the cumulative projects, combined, would be within the long-term forecasts from SANDAG. Therefore, cumulative impacts associated with population and housing would be **less than significant**.

3.12.6 Mitigation Measures

Based upon the analysis presented in Sections 3.12.4 and 3.12.5, impacts were determined to be less than significant. No mitigation measures are required.

3.12.7 Conclusion

Physical impacts related to population growth associated with the proposed project are addressed throughout the topic-specific chapters of this EIR. See Sections 3.1 through 3.17. When significant impacts were identified in the EIR, mitigation measures have been identified to reduce impacts to below a level of significance. All impacts would be mitigated to below a level of significance.

Construction of the proposed project would represent a temporary increase in construction employment. Given the relatively common nature and scale of the construction associated with the proposed project, the demand for construction employment would likely be met within the existing and future labor market in the City and North County San Diego area. The size of the construction workforce would vary during the different stages of construction, but a substantial quantity of workers from outside the local area would not be expected to relocate permanently. Impacts would be less than significant.

As discussed above, the proposed project would introduce an estimated 369 people resulting from the development of 119 multi-family residential units. Based upon regional projections, comparisons to current land use designations, and comparison with the RHNA planning periods, the introduction of the estimated 369 people would not be considered substantial. The future commercial uses are anticipated to have approximately four employees. It is expected that these employees would come from the local job market and would not require workers to relocate from outside the area. The proposed commercial use would not induce population growth.

Impacts would be **less than significant.**

3.13 Public Services

Introduction

This section analyzes the potential impact of the proposed project on public services including fire protection services, police protection services, schools, parks, and libraries. Please see Section 3.17, Utilities and Service Systems, for an analysis of water, wastewater, energy, telecommunications, stormwater, and solid waste services. The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.[16] Service provider letters are included in **Appendix P** of the Environmental Impact Report (EIR).

Table 3.13-1 summarizes the project- and cumulative-level public services analysis impact, by threshold of significance.

Table 3.13-1 Public Services Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
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:			
Fire protection services	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Police protection services	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Schools	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Parks	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Other public facilities	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.13.1 Existing Conditions

This section details the existing service providers and resources related to fire protection, police protection, schools, parks, and libraries.

Fire Protection

The San Marcos Fire Department (SMFD) would provide fire protection and emergency medical services to the project. The SMFD has existing automatic mutual aid fire agreements in place with the Cities of Carlsbad, Vista, Escondido, Encinitas, and the Rancho Santa Fe Fire Protection District. The

[16] http://www.san-marcos.net/work/economic-development/general-plan

SMFD has an Insurance Service Office Rating 1, on a scale of one to ten with one being superior service.

The SMFD currently operates 4 fire stations, 4 paramedic assessment engine companies, 1 paramedic assessment truck company, 5 paramedic transport ambulances (24-hour units), 1 shift battalion chief, and 1 on-call duty chief. SMFD also cross-staffs three wildland fire engines and a State of California/Office of Emergency Services wildland fire engine (City of San Marcos 2023). The Department also cross-staffs three wildland fire engines and a State of California/Office of Emergency Services (Cal OES) wildland fire engine.

The SMFD Station 1, located at 180 W. Mission Road, San Marcos, California 92069, is the closest station to the project site and would likely serve the project site should fire response or emergency services be needed (City of San Marcos 2023). SMFD Station 1 is located approximately 2 miles east of the project site. SMFD Station 1 houses an engine, truck, brush engine, ambulance, and battalion chief.

Police Protection

The San Diego County Sheriff's San Marcos Station provides law enforcement services to the city and unincorporated communities of Harmony Grove, Elfin Forest, Lake San Marcos, Hidden Meadows, Ivy Del, Del Dios, Lake Hodges, and the San Pasqual Valley (SDCSD 2023). The San Marcos Station is located at 182 Santar Place, approximately two miles east of the project site.

Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services (City of San Marcos 2012a). Services are available 24 hours a day, 7 days a week.

The San Marcos Station serves more than 111,000 residents and staffs more than 100 deputies, volunteers, and professional staff members (SDCSD 2023). Additionally, Community Oriented Police and Problem Solving teams are assigned to investigate community quality-of-life issues (SDCSD 2023). Lastly, the Sheriff's San Marcos Station has the only ASTREA (Sheriff's Aviation) helicopter landing pad in the County, which assists ground units and extends the range deputies can patrol (SDCSD 2023).

The County Sheriff's Department does not set response time goals. The Sheriff's Department does, however, prioritize different types of calls to better facilitate deputy dispatches. The Sheriff Department's priority categories are as follows: priority level 1 (lifesaving response calls), priority level 2 (expeditious response calls within confines of vehicle codes), priority level 3 (calls responded to as soon as possible), and priority level 4 (calls responded to when clear, still being alerted to violations that require immediate law enforcement action) (City of San Marcos 2012a).

Schools

The project site is located within the San Marcos Unified School District (SMUSD). SMUSD is 49 square miles in size and encompasses most of the City of San Marcos and portions of the cities of Vista, Escondido, and Carlsbad, as well as unincorporated areas of the County of San Diego between these cities. As of 2023, there were 10 elementary schools, 2 K–8 schools, 3 middle schools, 3 high schools, and 1 independent high school program that are a part of the SMUSD. In the 2021-22 school year, SMUSD served 19,341 students. (SMUSD 2023a).

Based upon information from SMUSD (2023c), students generated by the project would attend La Mirada Academy for grades K-8 and San Marcos High School for grades 9-12. Enrollment for the

2022/23 year was 997 students at La Mirada Academy and 3,528 students at San Marcos High School (SMUSD 2023b).

Parks

The purpose of the City's Parks, Recreation, and Community Health Element of the General Plan is to guide the City to provide recreational opportunities, which contribute to the health and well-being of the residents of San Marcos, and to provide goals and policies that outline the role recreational amenities play in achieving the City's vision for the future (City of San Marcos 2012a). There are 24 community parks, 13 neighborhood parks and three recreation centers in the city. A more detailed discussion of park and recreation facilities is discussed in Section 3.14, Recreation.

The closest park to the project site is Innovation Park, located approximately 0.75 mile to the east of the project site. Innovation Park, located at 1151 Armorlite Drive and has a dog park, pickleball court, play equipment, permanent restrooms, and picnic tables (City of San Marcos 2021b).

Libraries

The city is served by the San Diego County Library, San Marcos Branch located at 2 Civic Center Drive, approximately 2.25 miles southeast of the project site. The San Marcos Branch is 15,394 square feet (s.f.) (City of San Marcos 2012b). The library is open seven days a week. The San Diego County Library system has 33 branches, and E-library, two bookmobiles, and five digital kiosks (San Diego County Library 2021b).

3.13.2 Regulatory Setting

Local

San Marcos General Plan

The following are applicable goals and policies from the City of San Marcos General, Land Use and Community Design Element related to public services:

<u>Land Use and Community Design Element</u>

- Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.
    - Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.
    - Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.
- Goal LU-10: Fire protection, emergency services, and law enforcement: Provide effective, high-quality, and responsive services.
    - Policy LU-10.1: Provide demand-based firefighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Marcos to meet existing and future demands.
    - Policy LU-10.2: Work closely with the County of San Diego Sherriff's Department to determine and meet the community needs for adequate personnel, equipment, and state-

of-the-art technology to effectively combat crime, and meet existing and projected service demands.

- Policy LU-10.3: Continue to conduct public outreach and education regarding fire safety and crime prevention within San Marcos.

- Goal LU-11: Schools: Ensure all residents have access to high-quality education.
  - Policy LU-11.1: Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning educational opportunities are provided in superior, accessible facilities that complement the surrounding land uses.
  - Policy LU-11.2: Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.
- Goal LU-12: Libraries: Provide library resources and services that meet the needs of the community.
  - Policy LU-12.1: Provide adequate library facilities and technological access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for self-learning and academic enrichment.
  - Policy LU-12.2: Accommodate technological needs of the community and locate accessible technology in the library.

<u>Safety Element</u>

The following are applicable goals and policies from the City of San Marcos General Plan, Safety Element related to public services, including fire protection, police protection, parks, and libraries:

- Goal S-3: Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.
  - Policy S-3.1: Require development to be located, designed, and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility, and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.
  - Policy S-3.2: Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers.
  - Policy S-3.3: Require development to provide additional access roads when necessary, to provide for safe access of emergency equipment and civilian evacuation concurrently.
  - Policy S-3.4: Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.

- Goal S-6: Provide neighborhood safety through effective law enforcement.
    - Policy S-6.1: Continue to maintain demand-based law enforcement service levels to reduce the risk of criminal activity.
    - Policy S-6.2: Continue public education efforts and community outreach programs to promote community involvement in crime and drug prevention.
    - Policy S-6.3: Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.

Parks, Recreation, and Community Health Element

The following are applicable goals and policies from the City of San Marcos General Plan, Parks, Recreation and Community Health Element related to parks:

- Goal PR-1: Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high-quality recreational facilities.
    - Policy PR-1.1: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.
    - Policy PR-1.2: Update and maintain a Master Parks Plan and a Master Trails Plan that implement the City's long-term vision for a complete system of parks, trails, and recreation facilities.
    - Policy PR-1.3: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City.
    - Policy PR-1.4: Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.
    - Policy PR-1.5: Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.
    - Policy PR-1.6: Require new infill development to provide plazas, mini parks, or other civic spaces as part of their parkland requirement.
    - Policy PR-1.7: Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance, and creates a safe and comfortable environment.
    - Policy PR-2.2: Implement the trail network per the Master Trails Plan to increase opportunities for physical activity (e.g., walking, biking), healthy lifestyles, and to reduce reliance on cars.

Environmental Justice Element

The following are applicable goals and policies from the City of San Marcos General Plan, Environmental Justice Element related to parks:

- Goal EJ-2: Locate public facilities and services equitably throughout the community.
    - Policy EJ-2.7: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City (See Policy PR-1.3).
    - Policy EJ-4.12: Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings (See Policy S-6.3).
    - Policy EJ 2.6 and EJ-5.7: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors (See Policy PR-1.1).
    - Policy EJ-5.8: Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space (See Policy PR-1.4)
    - Policy EJ-5.10: Implement the trail network per the Master Trails Plan to increase opportunities for physical activity (e.g., walking, biking), healthy lifestyles, and to reduce reliance on cars (See Policy PR-2.2).

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, Land Use and Planning, the project is consistent with all applicable goals and policies related to public services.

3.13.3 Thresholds of Significance

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

Threshold #1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection.
- Police protection.
- Schools.
- Parks.
- Other public facilities.

3.13.4 Project Impact Analysis

Threshold #1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire Protection

As discussed in Section 3.13.1, above, the SMFD provides fire protection services to the city and would serve the project site. The proposed project would increase the demand for SMFD resources as a result of the development of residential uses and the associated population increase, as well as the proposed new commercial uses. Future residents and employees would increase the need for fire protection services through routine fire and emergency medical calls. As a condition of project approval, prior to the issuance of a grading permit, the applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic)[17]. This would offset the project's increase in demand for fire protection services.

Further, SMFD staff reviewed the project plans as part of the City's project processing and provided comments relating to 1) requirements for updating emergency response maps, if needed; 2) installation of fire hydrants and fire lane/access prior to placement of combustible materials on the site; 3) the testing of new structures for emergency responder radio coverage in accordance with Section 510 of the California Fire Code; 4) Section 17/61/210 (Mid-Rise Buildings) will apply to the project; 5) width and height clearance requirements for fire apparatus; 6) installation of fire hydrants; 7) installation of Knox key boxes; 8) lighted directory map at each driveway entrance; and 9) elevators shall be the condition of CFC Section 607 (Elevator Operation, Maintenance, and Fire Service Keys) and CBC Chapter 30 (Elevators and Conveying Systems). All of these requirements have been incorporated into the project design and/or included as conditions of response project approval. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new fire protection facilities and impacts would be **less than significant.**

Police Protection

As discussed in Section 3.13.1, above, the San Diego County Sheriff's Department provides law enforcement services to the city. More specifically, the project would be served by the San Marcos Station, located approximately 2 miles from the project site. The project would introduce approximately 369 residents on-site, resulting in an increased demand for existing police protection resources. The increased density of development on the project site would be expected to increase the frequency of emergency and non-emergency calls to the Sherriff's Department. However, as discussed in Section 3.13.1, above, over 100 deputies, volunteers, and professional staff serve the residents of the city. Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services. Unlike fire services, which respond solely to emergencies, law enforcement services consist of patrolling large areas 24 hours a day, 365 days a year. Police units are continuously mobile, and service calls are responded to by the nearest available mobile unit. At the San Marcos Station, patrol deputies are assigned to a geographical "beat" area, allowing deputies to become familiar with

[17] https://www.san-marcos.net/home/showpublisheddocument/24248/637163295768400000

citizens and problems within their "beats". As such, the location of the proposed project relative to the nearest station would not affect police protection. Further, to minimize the increased demand for police protection services, the project has been designed to improve the safety for future residents and visiting guests. Safety features proposed for the project include walls and fencing and an onsite property manager. Lastly, lighting would be implemented throughout the site to provide safely illuminated walkways, parking areas, and common areas, as described in Section 2.2.2.3 (Chapter 2, Project Description). Additionally, the project would annex into an existing Community Facilities District (CFD 98-01, Improvement Area No. 1) for police protection.

Thus, while new development places increased demand on police protection services, it is not anticipated that the proposed project would result in the need for construction of new policies facilities or expansion of existing police facilities. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities. Impacts resulting from the proposed project would be **less than significant**.

Schools

The project site is located within the service boundary of the SMUSD. Per SMUSD the following schools would serve the project:

- La Mirada Academy (grades K-8), 3697 La Mirada Drive, San Marcos
- San Marcos High School (grades 9-12), 1615 W. San Marcos Boulevard, San Marcos

Table 3.13-2 presents the number of students anticipated to be generated by the 119-unit residential project. As shown in Table 3.13-2, the project would generate 3 TK students, 23 K-8 students and 34 high school students for a total of 60 students.

Table 3.13-1. Student Generation

Grade	Generation Rate(1)	Number of Units Proposed	Students Generated
TK	0.02056	119	3
K-6	0.14393	119	18
7-8	0.04112	119	5
9-12	0.28567	119	34
		Total Students	**60**

Source: SUMSD 2023b.
Note: (1) The district has rates for single family, multi family and apartments. The apartment rate was used for the project.

Based upon information from SMUSD, San Marcos High School is currently at capacity (SMUSD 2023b). SMUSD is currently looking into leasing land and expanding the parking capacity at San Marcos High School. There is also district-wide capacity issues. The addition of students generated by the project would contribute to the District-wide capacity issues. The project applicant shall pay school mitigation fees pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) in effect at the time of building permit issuance. Current Level II school fees are $4.79/s.f. for residential development and $0.78/s.f. for commercial development (SMUSD 2023c). Further, consistent with General Plan Policy LU-11.2, the applicant shall provide a

letter from the school district to the City prior to the issuance of building permits confirming these fees have been paid.

Payment of these fees would assist in funding SMUSD's long-range plans. Senate Bill (SB) 50 states that the fees imposed by school districts shall constitute the exclusive method of considering and mitigating impacts on school facilities caused by a development project. Such payment shall provide "full and complete mitigation of the impacts of any legislative or adjudicative act…on the provision of adequate school facilities" (Government Code Section 65995(h)). As such, with contribution of required development fees, impacts to schools would be **less than significant**.

Parks

Buildout of the proposed project is estimated to add an additional 369 residents to the City. Assuming five acres of park space per 1,000 residents, this equates to a demand of approximately 1.85 acres of park space generated by project residents.

The project applicant would be required to pay the City's Public Facility Fees (PFF), which is required by all projects that increase the demand for park and recreation needs in the city. The PFF money would go towards the acquisition and development of local and community park facilities throughout the city, to offset the demand for public park space generated by the project, as described in Municipal Code Chapter 17.36 and 17.44. Payment of the PFF shall be made prior to City issuance of the first building permit for the proposed project. The PFF payment would ultimately contribute to development of new parks and recreational facilities and would offset the increase in demand of parks and recreational facilities generated by the proposed project, such that existing facilities would not be substantially deteriorated.

In addition, the project would provide 25,700 s.f. (0.59 acres) of common outdoor space and 7,632 s.f. of private open space. Project residents would have access to adequate on-site recreational facilities, which will help to offset increased use of existing parks and recreational facilities. As such, with payment of the required PFF in combination with provision of on-site common and private open space, impacts to parks would be **less than significant.**

Other Public Facilities

The project would develop 119 residential units, generating approximately 369 residents at the project site. Although not all of these residents would be new residents to the city, the generation of residents at the project site would increase the demands on other public facilities, including library services and additional resources, in comparison to the project site's current MU-3 designation which does not allow for a residential use. However, additional library services are available in the County through the Serra Cooperative Library System and California State University San Marcos (CSUSM). The Serra Cooperative Library System is a network of public, academic, and special libraries in the southern California counties of Imperial and San Diego. Serra helps member libraries provide expanded resources and services at reduced costs. CSUSM also allows community members to obtain a Community Borrow Card by showing a valid photo identification (CSUSM 2023). Community members can also borrow materials at Palomar College with a valid photo identification and proof of current mailing address (Palomar College 2023). These additional library resources are in the San Marcos community and provide more than 200,000 s.f. of additional library space. Therefore, adequate library services are available to serve the proposed project, and a **less than significant impact** is identified for this issue area.

3.13.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to public services, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to public services (see Table 2-3, Cumulative Projects).

Fire Protection Services

The geographic area for the cumulative analysis of fire protection and emergency services is those areas that are serviced by the SMFD. The cumulative projects that fall within this geographic area would add to the increase in demand for fire protection and emergency services, and the potential need for additional fire protection resources. The SMFD provides service to the City of San Marcos and has existing automatic mutual aid fire agreements in place with the Cities of Carlsbad, Vista, Escondido, Encinitas, and the Rancho Santa Fe Fire Protection District. However, all cumulative projects would be required to participate in existing Community Facilities Districts as determined necessary. Future projects would be required to offset the increase in demand caused by their respective projects. Development fee payments would go towards providing the additional staff and equipment that would be needed by SMFD in the future to provide fire protection services, including potential new fire stations. Similarly, to offset any potential cumulative impacts to fire protection services, the project would pay all required development impact fees. Thus, cumulative impacts to fire protection services would be **less than significant.**

Police Protection Services

The geographic area for the cumulative analysis of police protection is those areas that are serviced by the San Diego County Sheriff's Department. All cumulative projects listed in Table 2-3 would result in an increase in demand for police protection services from the Sheriff's Department, and the potential need for additional police protection resources. Nonetheless, all cumulative projects would be required to offset increased demand for police protection services through the payment of fees. These fees would provide for additional staff and equipment to assist in the provision of law enforcement services. As such, with payment of fees, cumulative impacts to police protection services would be **less than significant.**

Schools

Based upon information from SMUSD, San Marcos High School is currently at capacity (SMUSD 2023b). SMUSD is currently looking into leasing land and expanding the parking capacity at San Marcos High School. There are also district-wide capacity issues. The addition of students generated by the project along with cumulative development projects would contribute to the District-wide capacity issues.

As discussed in Section 3.13.4, the proposed project would be required to contribute development fees to SMUSD, pursuant to California Education Code Section 17620 et seq. and Government Code

Sections 65995(h) and 65996(b) as well as the City's Municipal Code Section 17.52.050. All the cumulative projects included in Table 2-3 that include residential development would result in increased demand for school services, and would be required to pay school fees to offset the increase demand, similar to the proposed project. Additionally, non-residential projects are also required to pay school fees consistent with SMUSD's developer fee schedule. As such, with contribution of required development fees by the proposed project and cumulative development projects, cumulative impacts to schools would be **less than significant.**

Parks

The proposed project as well as the cumulative projects that are in the City of San Marcos (as identified in Table 2-3) would add to the cumulative demand for park and recreation facilities in the city. All residential projects that increase the demand for park and recreation needs in the city are required to provide park space and/or pay park in lieu-fees. The environmental documentation prepared for each project would analyze impacts associated with the construction of any parks within each overall development footprint. As discussed in Section 3.13.4, the proposed project would be required to pay the City's PFF, which is required for all projects that increase the demand for park and recreation needs in the city. The PFF would be used for developing neighborhood and regional parks. It is expected that all cumulative projects that increase demand for parks and recreation needs would also be required to pay these fees. As such, cumulative impacts on recreational facilities in the city would be **less than significant.**

Libraries

Cumulative projects within the service area of the San Marcos Branch Library would result in an increase in demand for library services. Aside from the San Marcos Branch, community members can obtain borrowing privileges at the CSUSM campus and the Palomar Community College. These additional library resources are in the San Marcos community and provide over 200,000 square feet of additional library space. Therefore, adequate library resources are available to serve cumulative development in San Marcos, and cumulative impacts to library services would be **less than significant.**

3.13.6 Mitigation Measures

No significant impacts to public services were identified; thus, no mitigation measures are required.

3.13.7 Conclusion

Development of the proposed project would result in an increase in demand for fire protection, emergency medical services, police protection, school services, and library facilities. However, the project applicant would be required to pay all applicable development fees including payment of school mitigation fees, development fees, and PFF. These feeds are utilized to provide improvements to public services in San Marcos, including fire and police protection, schools, parks, and libraries The payment all required development fees by the proposed project and cumulative development projects would offset any potential cumulative impacts to public services. The project applicant would also annex into CFD 2001-01 for fire and paramedic and CFD 98-01, Improvement Area No. 1 for police protection, which would offset and minimize potential impacts. As such, with payment of fees towards schools, parks, fire, and police, impacts to public services would be **less than significant.**

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3.14 Recreation

Introduction

This section analyzes the potential impacts of the proposed project to existing recreational facilities. The analysis also considers the *California Environmental Quality Act (CEQA) Guidelines* Appendix G and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.[18]

Table 3.14-1 summarizes the project- and cumulative-impact analysis by threshold for the proposed project.

Table 3.14-1. Recreation Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
.Threshold #1: The project increases the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
.Threshold #2: The project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.14.1 Existing Conditions

This section describes existing parks, recreation facilities, and trails in the city, on the project site and in the project vicinity. The City of San Marcos's Parks Master Plan classifies parks into eight categories: Regional Park; Community Park; Neighborhood Park; Mini (Urban) Park; Special Use Facility; Historical, Monument, and Memorial; Recreation Center; and Aquatic Center (City of San Marcos 2018). Details on each of these park categories are included below.

Regional Parks

Regional Parks are defined as parks that are a minimum of 50 acres, with 75 or more acres being optimal. The drive time to a Regional Park is approximately 1 hour or less, and offers a variety of terrain, scenic views, cultural amenities, and extensive natural areas with both passive and active opportunities (City of San Marcos 2018).

The closest regional parks to the project site are South Lake Park and Double Peak Park. South Lake Park is located at 975 Sunstone Drive, approximately three miles southeast of the project site. South Lake has a lake a trail connections. Double Peak Park is located at 900 Double Peak Drive,

[18] http://www.san-marcos.net/work/economic-development/general-plan

approximately three miles southeast of the project site. Double Peak has an amphitheater, kiosk, permanent restrooms, picnic shelter, picnic tables, play equipment, telescope, and trail connections.

Community Parks

Community Parks are defined as parks that are a minimum of 10 acres and up to 100 acres (City of San Marcos 2018). Community Parks serve two or more neighborhoods with a service area of 0.5 to 3 miles. There are five Community Parks in the City of San Marcos: Bradley Park, Woodland Park, Walnut Grove Park, Discovery/Lakeview Park, and Double Peak Park. Bradley Park, Walnut Grove Park, Discovery/Lakeview Park, and Double Peak Park would serve the project site because the project site is within the service area of these four parks (City of San Marcos 2018).

The closest community park to the project site is Bradley Park, located at 1587 Linda Vista Drive, approximately one mile south of the project. Bradley Park is developed with arena soccer field, ball fields, barbeque area, horseshoe court, multi-purpose fields, a picnic shelter, picnic tables and play equipment.

Neighborhood Parks

Neighborhood Parks are defined as parks that are generally 5 acres, although 7 to 10 acres is optimal. Neighborhood Parks have a service area of 0.25 to 0.5 mile and should be accessible by arterial roads. There are 14 Neighborhood Parks in San Marcos: Buelow Park, Connors Park, Hollandia Park, Innovation Park, Knob Hill Park, Jacks Pond Park, Cerros de Las Posas Park, Mission Sports Park, Montiel Park, Mulberry Park, Richmar Park, San Elijo Park, Simmons Family Park, and Sunset Park. (City of San Marcos 2018).

The closest neighborhood parks to the project site are Innovation Park and Mission Sports Park. Innovation Park, located at 1151 Armorlite Drive, is approximately 0.75 mile southeast of the project site. It has a dog park, pickleball court, play equipment, permanent restrooms, and picnic tables (City of San Marcos 2023a). Mission Sports Park, located at 931 Bailey Court is approximately one mile east of the project site and has a lighted ballfield, permanent restrooms, picnic shelter, picnic tables and play equipment.

Mini (Urban) Parks

Mini (Urban) Parks are defined as parks that are 2,500 square feet (s.f.) to 1 acre in size, although a park area of less than five acres could be considered a Mini Park (City of San Marcos 2018). A Mini Park's service area is 0.25 mile or less and is in a residential setting. There are 18 Mini (Urban) Parks in San Marcos: Alder Glen Park, Amigo Park, Bougher Park, Children's Park, Civic Center Park, Creek View Park, Discovery Meadows, Foothill Park, The Laurels Park, Optimist Park, Pebblestone Park, Quail Valley Park, Questhaven Park, Regency Hills Park, Ridgeline Trailhead, Santa Fe Hills Park, Summer Hill Park, and Valley View Park.

The closest Mini Parks to the project site are Creek View Park and Valley View Park. Creek View Park located at 1299 Corte Encanto is approximately 0.5 mile northeast of the project site. Creek View Park has picnic tables and play equipment. Valley View Park, located at 1399 Camino del Sol is approximately 0.5 mile north of the project. Valley View Park has play equipment, adapted play equipment, a turf play area and picnic tables.

Special Use Facility

A Special Use Facility includes three categories of facilities (City of San Marcos 2018):

- **Historic/Cultural/Social Sites** – A unique local resource offering historical, educational, and cultural opportunities. Examples include historic downtown areas, performing arts parks, arboretums, display gardens, performing arts facilities, indoor theaters, churches, public buildings, and amphitheaters.
- **Recreation Facilities** – A specialized or single-purpose facility. Examples include community centers, senior centers, community theaters, hockey arenas, marinas, golf courses, and aquatic parks.
- **Outdoor Recreation Facilities** – Examples include tennis centers, softball complexes, sports stadiums, skateboard parks, and bark parks.

The size and service area of a Special Use Facility varies greatly.

Historical, Monuments, and Memorials

Historical, Monuments, and Memorials parks preserve monuments and memorials, provide programmed historical interpretation, attract tourists, and offer passive recreation opportunities (such as trails) (City of San Marcos 2018). The size and service area varies. There are no historical monuments or memorials in the vicinity of the project site.

Recreation Centers

Recreation Centers are intended to provide indoor leisure facilities and programs at a reasonable cost. Recreation centers also serve as meeting facilities for local social gatherings and public events, and are designed to be a hub of recreation activity (City of San Marcos 2018). The size and service area varies. The closest recreation center is located at 3 Civic Center Drive at San Marcos City Hall.

Aquatic Centers

Aquatic Centers are swimming facilities that provide active recreation for residents. The size of these facilities varies. The service area is a minimum population of 25,000, and the recommended level of service is one Aquatic Center site per 40,000 persons in San Marcos (City of San Marcos 2018). The closes aquatic center to the project site is the Las Posas Park Pool located at 1387 W. Borden Road. The Las Posas Park Pool has a 25-yard recreational lap pool, splash pad and a picnic area.

Trails

The City of San Marcos currently owns and manages 63 miles of completed trails, with plans to expand the trail network to 72 miles. The goal of the trail system is two-fold: to serve as a recreational amenity, and to provide an alternative means of circulation for non-motorized travelers through an inter-linked citywide system of trails connecting residential neighborhoods to parks, schools, colleges, stores, restaurants, movie theaters, other important destinations within San Marcos, and the wider regional trails system (City of San Marcos 2018).

The Inland Rail Trail is the closest trail to the project site. The Inland Rail Trail runs alongside the SPRINTER light rail service connecting Escondido to Oceanside. The trail runs for over ten miles

through the San Diego County communities of Escondido, San Marcos, and parts of Vista, with a 3-mile continuation through Vista added to the route in January 2021.

General Plan Park Standards

The San Marcos General Plan park acreage standard calls for five acres of parkland for every 1,000 residents. As of January 1, 2022, the California Department of Finance (DOF) estimates the population of the city is 93,585 (DOF 2022). Based on growth projections provided by the Series 14: 2050 Regional Growth Forecast prepared by the San Diego Association of Governments (SANDAG), it is estimated that the City's population growth will reach 104,365 persons by 2035, and 119,098 persons by 2050 (SANDAG 2022). Using 2022 population figures, approximately 468 acres of parkland is required to meet the General Plan park standard. Using 2035 population estimates, approximately 522 acres of parkland would be required. Approximately 596 acres of parkland would be required using 2050 population estimates. There is currently over 290 acres of parkland in the city, for a park acreage ratio of approximately 3.1 acres of parkland for every 1,000 residents. Therefore, the City does not currently meet its General Plan park acreage standard.

3.14.2 Regulatory Setting

This section describes the state and local laws and regulations that are applicable to the proposed project.

State

Quimby Act

Since the passage of the 1975 Quimby Act (California Government Code Section 66477), cities and counties have been authorized to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated by the Quimby Act cannot be used for the operation and maintenance of park facilities. The goal of the Quimby Act was to require developers to help mitigate the impacts of property improvements. The act gives authority for passage of land dedication ordinances only to cities and counties.

The Landscape and Lighting Act of 1972

The Landscape and Lighting Act of 1972 enables cities, counties, and special districts to acquire land for parks, recreation, and open space. A local government may also use the assessments to pay for improvements and maintenance in these areas.

The Mello-Roos Community Facilities Act

The Mello-Roos Community Facilities Act (Government Code [GC] section 53311 et seq.) is a tax-based financing method available to cities, counties, and special districts. It authorizes local governments to establish community facilities districts within which they may levy special taxes and issue bonds to finance open space acquisition, maintenance, and other programs. Approval of the special tax and any related bond issue requires approval by two-thirds of the district electorate.

Local

City's Municipal Code Chapter 17.36 – Park and Recreational Development Construction Fee

As described in Chapter 17.36 in the City's Municipal Code, the continued increase in the development of dwelling units and population within the city has created the need for planning, acquisition, improvement, expansion and operation of public parks, playgrounds, and recreational facilities in the city, and thus the need for additional revenues with which to finance such facilities. This chapter of the Municipal Code requires that each builder of each dwelling unit to be constructed within the City of San Marcos shall, prior to the construction, pay a fee, as adopted by Resolution by the City Council.

City's Municipal Code Chapter 17.44 – Development Services and Public Facilities, Exaction, Fees and/or Costs

The City recognizes that the continued development of property within the city's jurisdictional boundaries has resulted in an increased demand on existing public services, facilities, and infrastructure; the need for expansion of public services, facilities, and infrastructure; and/or the need for the installation of new public services, facilities, and infrastructure. It is the intent of the City that each applicant for a grading, construction, building and/or development permit or entitlement shall, prior to the issuance of such permit or entitlement, pay Public Facilities Fees. The funds generated by the payment of fees described Chapter 17.44 shall be deposited into separate accounts established for the purposes of maintaining, expanding, and installing public infrastructure. Such public infrastructure includes active or passive open space and parks.

City's Municipal Code Section 20.225.120 – Outdoor Space Standards

All new development in the MU-1 and MU-2 Zones is required to provide open space. Types of open space allowed include common outdoor open space, common indoor open space, and private open space subject to the standards of Tables 20.225-6 and 20.225-7 of the Zoning Ordinance.

San Marcos General Plan – Parks, Recreation, and Community Health Element

The following are applicable goals and policies from the City of San Marcos General Plan, Parks, Recreation, and Community Health Element:

- Goal PR-1: Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high-quality recreational facilities.
    - Policy PR-1.1: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.
    - Policy PR-1.2: Update and maintain a Master Parks Plan and a Master Trails Plan that implement the City's long-term vision for a complete system of parks, trails, and recreation facilities.
    - Policy PR-1.3: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City.

- Policy PR-1.4: Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.
- Policy PR-1.5: Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.
- Policy PR-1.6: Require new infill development to provide plazas, mini parks, or other civic spaces as part of their parkland requirement.
- Policy PR-1.7: Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance, and creates a safe and comfortable environment.

The following are applicable goals and policies from the City of San Marcos General Plan Environmental Justice Element:

- Goal EJ-2: Locate public facilities and services equitably throughout the community.
  - Policy EJ-2.6: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors (See Policy PR-1.1).
  - Policy EJ-2.7: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City (See Policy PR-1.3).
- Goal EJ-5: Encourage physical activity and improved physical fitness
  - Policy EJ-5.7: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors (See Policy PR-1.1).
  - Policy EJ-5.10: Implement the trail network per the Trails Master Plan to increase opportunities for physical activity (e.g., walking, biking), healthy lifestyles, and to reduce reliance on cars (See Policy PR-2.2).

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies related to parks and recreation.

Parks Master Plan

The City adopted its Parks Master Plan in 1990, which presents a vision of parks and recreation facilities for the City. Since that time, the city has changed significantly. The latest Parks Master Plan Update was adopted in June 2018. The goal of the Parks Master Plan Update is to identify potential improvement to the park system and, as funding becomes available, suggest additional amenities for new parks and improvements at existing park facilities (City of San Marcos 2018).

Master Trails Plan

The City's Master Trails Plan, adopted in 1991, details a trails implementation strategy and description of each proposed trail segment. The plan envisions a system of connectivity through trail corridors networked across the city. To meet this goal, the Master Trails Plan recommends creation of 72 miles of trails that will provide an alternative means of circulation and recreational opportunities to San Marcos residents and visitors. These trails will include 21 miles of urban trails, 36 miles of multiuse trails, and 15 miles of soft-surface trails that connect neighborhoods to parks, schools, and workplaces as well as to the trails systems of neighboring cities and the County of San Diego (City of San Marcos 2017). An update to the City's Master Trail Plan is underway.

3.14.3 Thresholds of Significance

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

- Threshold #1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Threshold #2: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.14.4 Project Impact Analysis

As discussed in Section 2.2.2.1 of this EIR, there are two main categories of open space proposed for the project – common open space and private open space.

The City of San Marcos Zoning Ordinance (Table 20.255-6, Common Outdoor Open Space Required as a Percentage of Project Area) identifies common outdoor open space requirements for projects proposed in the MU-1 and MU-2 zones, such as the proposed project (upon approval of the requested General Plan Amendment and zone change). For projects that propose 10 or more residential units and have a lot size greater than 30,000 s.f., 20 percent of the project area must be common outdoor open space. Common outdoor open space for the project would be approximately 23% of the site. The outdoor common space would be 25,700 s.f. and includes 24,415 s.f. at grade (pool, spa, outdoor "living room", open turf area with play equipment and passive open space areas) and a 1,285 s.f. rooftop deck. Figure 2-7 presents a rendering of the recreation area. Proposed common indoor space would be 1,250 s.f. and includes a fitness area and meeting room. All common open space would be for the use of future residents and would be maintained by the property management company. The project would exceed the requirements for common outdoor open space.

Private open space within the proposed project consists of private patio space and private balcony/deck space. The City of San Marcos Zoning Ordinance (Table 20.255-7, Indoor/Private Open Space Requirements) identifies private open space requirements for projects proposed in the MU-1 and MU-2 zones. For projects that propose more than 21 units, a minimum of 36 s.f. of private unit open space per unit is required. For the proposed project's 119 units, this equates to a total of 4,284 s.f. of private open space. The project provides private open space ranging from 50 s.f. to 80 s.f. depending on the unit size and plan level, for a total of 7,632 s.f. The project would exceed the requirements for private open space for each unit.

Threshold #1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Based on the population rate of 3.1 persons per housing unit in San Marcos, buildout of the proposed project is estimated to add an additional 369 residents to the city. This increase in residents would increase demand for neighborhood and regional parks and other recreational facilities. Assuming five acres of park space per 1,000 residents (the minimum standard goal of the City's General Plan discussed in Section 3.14.2), the addition of residents on site equates to a demand of approximately 1.85 acres of public park space generated by project residents.

As discussed above, the project would provide 25,700 s.f. (0.59 acres) of common outdoor space including recreational amenities such as a pool, and play equipment. The project also provides for 7,632 s.f. of private open space and the proposed project would meet and exceed the common useable and private open space requirements per the City's Municipal Code. The common and private open space and amenities included on the project site would provide residents with recreational opportunities and help to offset the additional demand on existing parks and recreational amenities generated by the proposed project.

Additionally, the project applicant would be required to pay the City's Public Facility Fees (PFF), which is required by all projects that increase the demand for park and recreation needs in the City. The PFF money would go towards the acquisition and development of local and community park facilities throughout the city to offset the demand for public park space generated by the project, as described in Municipal Code Chapter 17.36 and 17.44. Payment of the PFF shall be made prior to City issuance of the first building permit for the proposed project. The PFF payment would ultimately contribute to development of new parks and recreational facilities and would offset the increase in demand of parks and recreational facilities generated by the proposed project, such that existing facilities would not substantially deteriorate. With payment of the required PFF in combination with provision of on-site common and private open space, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Impacts to existing neighborhood and regional parks would be **less than significant.**

Threshold #2: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impacts associated with construction of the proposed project's public and private open space are considered within the overall development footprint for the proposed project. Impacts from the development of proposed recreational facilities have been considered in the project impact analysis and mitigation measures for the proposed project, as a whole, are discussed in the various sections of this EIR.

As stated under Threshold #1, the project applicant would be required to pay the City's PFF that would go towards the acquisition and development of local and community park facilities throughout the city. As such, the project applicant may contribute to the construction or expansion of recreational facilities offsite that may have an adverse physical effect on the environment. Future expansion or development of new recreational facilities would be subject to CEQA environmental review as appropriate, which would identify and address any site-specific impacts. Therefore, impacts due to the construction or expansion of recreational facilities are considered **less than significant.**

3.14.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to recreation, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to recreation. All of the cumulative projects within the city identified in Table 2-3 are considered in this cumulative analysis.

The proposed project as well as the cumulative projects that are in the City of San Marcos would add to the cumulative demand for park and recreation facilities in the city. All cumulative projects that increase the demand for parks and recreation facilities in the city would be required to provide park space, common open space, private open space, and/or pay the City's PFF. Similar to the proposed project, the provisioning of onsite open space and payment of PFF, as applicable, would ensure that cumulative development would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Therefore, cumulative impacts to existing neighborhood and regional parks would be **less than significant**.

As with the proposed project, the potential environmental impacts of any recreational and open space amenities included as part of the cumulative development projects would be addressed along with the environmental analysis of each cumulative project as a whole. Furthermore, any substantial expansion or development of new recreational facilities funded by PFF would be subject to the appropriate CEQA environmental review prepared by the City, which would identify and address any site-specific impacts. Therefore, cumulative impacts associated with the construction or expansion of recreational facilities would be **less than significant**. In summary, implementation of City policies, such as the collection of PFF, along with compliance with CEQA requirements would ensure that cumulative impacts to recreational facilities would be properly addressed and mitigated. Therefore, cumulative impacts to recreational facilities are considered **less than significant**.

3.14.6 Mitigation Measures

No significant impacts to recreation were identified; thus, no mitigation is required.

3.14.7 Conclusion

The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The additional residents would require approximately 1.85 acres of new park space to fulfill the City's General Plan requirement of five acres of park space per every 1,000 residents. The proposed project would be required to pay the City's PFF, which would go towards the acquisition and development of local and community park facilities throughout the city. The project design also includes 25,700 s.f. (0.59 acres) of common outdoor space and 7,632 s.f. of private open space to provide residents with onsite recreational opportunities. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant.

Lastly, any impacts associated with the development of the proposed open space have been considered in the project impact analysis and mitigation for the proposed project as a whole and are discussed in the various sections of this EIR. Therefore, impacts resulting from construction of new park facilities would be less than significant.

3.15Transportation

This section provides a transportation impact analysis for the proposed project related to transit, roadway, bicycle and pedestrian facilities, vehicle miles traveled, design feature hazards and emergency access. The section is based on the following reports, which are included as **Appendices M and N** of the Environmental Impact Report (EIR):

- *Local Transportation Analysis, Capalina Development*. Prepared by CR Associates, August 8, 2023 (CRA 2023a)
- *Vehicle Miles Traveled (VMT) Analysis Technical Memorandum*, Capalina Development. Prepared by CR Associates, May 19, 2023 (CRA 2023b)

Section 3.10, Land Use and Planning, includes a description of existing traffic conditions, methodology, baseline conditions and trip generation for the local transportation analysis/level of service (LOS) analysis. Section 3.10 analyzes the project's consistency with the Mobility Element of the General Plan. **Table 3.15-1** summarizes the project- and cumulative-level traffic impact analysis, by threshold.

Table 3.15-1. Transportation Summary of Impacts

Thresholds of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Potentially Significant	Less than Significant	Less than Significant Without Mitigation
#4: Result in inadequate emergency access	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.15.1 Existing Conditions

The City strives to create a robust, city-wide system of roadways, bicycle and pedestrian paths and routes, as well as public transit options, which provide residents with alternative modes of travel as well as recreational opportunities.

Existing Roadways

Access to the project site from the regional transportation network would be provided via California State Route 78 (SR-78) freeway, N. Rancho Santa Fe Road, W. Mission Road, and Capalina Road.

These facilities will either provide a direct connection to project site via project driveways, or will provide a critical link between the project site and the regional transportation network.

Existing Transit Service

The project site is located near several transit lines serviced by North County Transit District (NCTD). There is an NCTD bus stop on W. Mission Road along the project frontage that serves east-bound buses. There is also a bus stop on W. Mission Road serving west-bound busses at N. Rancho Santa Fe Road. The following provides a description of the transit services in the project vicinity.

- Bus Route 304 – This bus route is serviced along W. Mission Road in the eastbound/westbound direction within the project study area. This bus route connects the Palomar College Transit Center to the Encinitas Transit Station. Operations start at 4:53 AM and end at 8:23 PM between Monday and Friday, with 30-minute intervals. On Saturdays, operations start at 6:53 AM and end at 9:05 PM, with 60-minute intervals. This route does not operate on Sundays.
- Bus Route 305 – This bus route is serviced along W. Mission Road in the eastbound/westbound direction within the project study area. This bus route connects the Vista Transit Center to the Escondido Transit Center. On Monday through Friday, operations start at 4:37 AM and end at 11:30 PM, with 30-minute intervals. On Saturdays and Sundays, operations start at 5:34 AM and end at 11:31 PM, with 30-minute intervals.
- Bus Route 604 – This route is serviced along W. Mission Road and North Rancho Santa Fe Road within the project study area. This bus route connects the Palomar Transit Center to the Encinitas Station. This route only operates during school arrival and dismissal periods Monday through Friday. This route does not operate on the weekend.
- SPRINTER – This light rail line runs between Oceanside Transit Center and Escondido Transit Center (eastbound and westbound direction). The nearest stop to the project site is the Palomar College Transit Center and is located 0.6 mile to the east. Operations start at 4:17 AM and end at 9:10 PM between Monday and Sunday, with 30-minute intervals.

Existing Bicycle Conditions

Under Existing conditions, Class II bicycle facilities exist along N. Rancho Santa Fe Road and W. Mission Road. Additionally, a Class I multi-use path exists along the south side of W. Mission Road east of N. Pacific Street. This Class I multi-use path is identified as the Inland Rail Trail which is a proposed 21-mile facility that will eventually connect both the Cities of Oceanside and Escondido while passing through San Marcos, Vista, and unincorporated areas of the San Diego County. The Inland Rail Trail is expected to be fully constructed some time in 2025.

Per the City of San Marcos General Plan, there are no planned bicycle facilities improvements along the project frontage.

Existing Pedestrian Connections

Pedestrian facilities are intermittently provided within the project study area. Paved sidewalks are provided along Capalina Road except for along the project frontage on the north side of Capalina Road. Paved sidewalks are provided along W. Mission Road, including the project's frontage.

3.15.2 Regulatory Setting

The following provides a general description of the applicable regulatory requirements and guidelines for the project area.

State Regulations

California Department of Transportation

The California Department of Transportation (Caltrans) is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans has established standards for roadway traffic flow and has developed procedures to determine if intersections require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects.

AB 1358 – California Complete Streets Act of 2008

The California Complete Streets Act of 2008 (Assembly Bill [AB] 1358) requires circulation elements as of January 1, 2011 to consider the transportation system from a multi-modal perspective, including public transit, walking, and biking, which have traditionally been marginalized in comparison to autos in contemporary American urban planning.

SB 743, CEQA Guidelines Update

In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, which included the California Natural Resources Agency Guidelines for the Implementation of CEQA. As a result, the California Governor's Office of Planning and Research (OPR) updated and released the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) in December 2018. According to the updated guidelines, lead agencies had until July 1, 2020 to comply with the updated CEQA revision. The City of San Marcos has adopted Vehicle Miles Traveled (VMT) thresholds as part of their Transportation Impact Analysis Guidelines (City of San Marcos 2020a).

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process; cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City can continue to require congestion-related transportation analysis and mitigation projects through planning approval processes outside CEQA. Section 3.10, Land Use and Planning, includes results of the LOS analysis prepared for the project.

Local Plans and Policies

SANDAG San Diego Forward: The 2021 Regional Plan

The Regional Plan, adopted in 2021 by the San Diego Association of Governments (SANDAG), 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 is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative transportation demand and management strategies.

The Regional Plan combines the Regional Comprehensive Plan and the Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS). By integrating land use and transportation plans, the Regional Plan is intended to achieve greenhouse gas emission reduction targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities Act.

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

The Regional Plan also supports other regional transportation planning and programming efforts, including overseeing which projects are funded under the Regional Transportation Improvement Program and the TransNet program. SANDAG is applying data-driven strategies, innovative technologies, and stakeholder input to create a future system that is faster, fairer, and cleaner. Part of this data-driven approach includes the implementation of five key transportation strategies referred to as the 5 Big Moves. These strategies provide the framework for the Regional Plan and consider policies and programs, changes in land use and infrastructure, the existing transportation highway and transit networks, and trends in technology to optimize use of the transportation system. Together, these initiatives will create a fully integrated, world-class transportation system that offers efficient and equitable transportation choices, meets state climate targets, and supports local jurisdictions' achievements of Climate Action Plan goals.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. In developing the amendment, SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's greenhouse gas emissions target set by CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. The draft amendment was released for public review and comment on June 13, 2023.

SANDAG Smart Growth Opportunity Area

The project site is located within the SM-7 Mixed Use Transit Corridor as identified in the SANDAG Smart Growth Concept Map for North County. The Smart Growth Concept Map identifies locations in the region that can support smart growth, transit, walking, and biking. The map serves as the foundation for prioritizing transportation investments and determining eligibility for local smart growth incentive funds.

Congestion Management Program

The 2008 Congestion Management Program (CMP) for San Diego County was developed to meet the requirements of Section 65089 of the California Government Code. Since that time, the local agencies within San Diego County approved to opt out of the CMP requirements, as allowed within the Government Code. As such, there are no CMP-specific requirements associated with this project. However, to ensure the region's continued compliance with the federal congestion management process, SANDAG has prepared San Diego Forward: The 2021 Regional Plan in compliance with 23 Code of Federal Regulations 450.320. The Regional Plan incorporates performance monitoring and measurement of the regional transportation system, multimodal alternatives to single-occupancy vehicles, land use impact analysis, congestion management tools, and Integration with the Regional Transportation Improvement Program process.

City of San Marcos Transportation Impact Analysis Guidelines

The City of San Marcos approved *Transportation Impact Analysis Guidelines* (TIAG) on November 16, 2020 (City of San Marcos 2020a). TIAG provide screening criteria for determining whether a land development project should conduct a VMT analysis. These thresholds are based on the project's consistency with the General Plan, estimated daily trips, project location, and other project characteristics. A VMT analysis applies to all land development projects except for those that meet at least one of the provided screening criteria.

City of San Marcos Bikeway Master Plan

The 2005 Bikeway Master Plan is an update to the City's original master plan adopted in 2001. Goals of the master plan were to obtain State Bicycle Transportation Account (BTA) grant funds, improve bicycle facilities throughout the city for safer routes to school, create connections to adjacent cities and incorporate an environmental inventory analysis. One of the goals of the master plan was to connect the city's trails to bicycle facilities to complete a safe and enjoyable trail and bikeway system.

San Marcos General Plan

The Land Use and Community Design Element of the General Plan identifies specific policies related to congestion management. Those that are applicable to the proposed project are identified below.

- Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.
    - Policy LU-1:1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.
- Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.
    - Policy LU-3.4: Provide non-motorized (pedestrian and bicycle) access/circulation within, and to mixed-use centers to reduce reliance on the automobile.
    - Policy LU-3.5: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.

  - Policy LU-3.7: Require new development to prepare traffic demand management programs.
  - Policy LU-3.8: Require new development and discretionary actions to annex into a Congestion Management Community Facilities District.

The Mobility Element of the General Plan identifies specific goals and policies related to an efficient circulation system, traffic calming and safety, and alternative modes of travel. Those that are applicable to the transportation analysis for the proposed project are identified below. Policy M-1.4, which addresses LOS, is analyzed in Section 3.10, Land Use and Planning.

- Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.
  - Policy M-1.1: Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map.
  - Policy M-1.2: Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.
  - Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the city.
  - Policy M-1.4: Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element:
    - LOS D or better for Vehicles as a prioritized mode
      - Generally, provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).
    - The City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).
  - Policy M-1.6: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.
  - Policy M-1.7: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.
- Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.
  - Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate, within residential neighborhoods, while maintaining the City's desire to provide connectivity on the roadway network.

  - Policy M-2.3: Consider roundabouts, as appropriate, as an intersection control device with demonstrated air quality, traffic efficiency, and safety benefits.

- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.
  - Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.
  - Policy M-3.2: Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.
  - Policy M-3.3: Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.
  - Policy M-3.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.
  - Policy M-3.9: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.

The Environmental Justice Element of the General Plan identifies specific goals and policies related to access to and facilitation of walking, bicycling, and transit use. Those that are applicable to the proposed project are identified below.

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
  - Policy EJ-1:1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices (See Policy LU-1.1).
  - Policy EJ-1.3: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use (See Policy LU-2.1).
  - Policy EJ-1.6: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the city (See Policy M-1.3).
  - Policy EJ-1.8: Develop an integrated multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City (See Policy M-3.1).
- Goal EJ-2: Locate public facilities and services equitably throughout the community.

  - Policy: EJ-2.10: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network (See Policy M-1.6).
  - Policy: EJ-2.11: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor (See Policy M-1.7).

- Goal EJ-5: Encourage physical activity and improved physical fitness.
  - Policy: EJ-5.1: Provide non-motorized (pedestrian and bicycle) access/ circulation within, and to, mixed-use centers to reduce reliance on the automobile (See Policy LU-3.4).
  - Policy EJ- 5.2: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways (See Policy LU-3.5).
  - Policy EJ-5.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians (See Policy M-3.5).
  - Policy EJ-5.6: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities (See Policy M-3.9).

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As presented in Table 3.10-7 in Section 3.10, the project is consistent with the applicable transportation-related goals and policies.

3.15.3 Thresholds of Significance

Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* provides thresholds for determining significant environmental impacts. A project may be deemed to have a significant impact on transportation if it would:

- Threshold #1: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; or
- Threshold #2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b); or
- Threshold #3: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Threshold #4: Result in inadequate emergency access.

3.15.4 Project Impact Analysis

Threshold #1: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Access to the proposed project from the regional transportation network would be provided via California State Route 78 (SR-78) freeway, N. Rancho Santa Fe Road, W. Mission Road, N. Pacific Street, and Capalina Road. These facilities would either provide a direct connection to the proposed project, via the project driveway, or would provide a critical link between the proposed project and the regional transportation network.

The project would not result in any conflicts related to plans or policies addressing transit, bicycle, and pedestrian facilities. The project is located within one half mile of NCTD transit lines, including bus routes and 0.6 mile from closest SPRINTER station. Construction of the project may results in a temporary disruption of the bicycle lane and sidewalk along the project frontage with W. Mission Road. This specifically relates to the installation of the water line to serve the project. The contractor would install signage in advance of the work to notify cyclists and pedestrians. No impact to the transit stop is anticipated.

Sidewalks are proposed along the project frontage along Capalina Road. Sidewalks are also proposed surrounding the main building and recreational area providing direct access to the dwelling units, fitness center, leasing office, and retail land use component of the proposed project. Lastly, sidewalks are proposed along the south and west side of the buildings on the north side of the property connecting directly to existing sidewalk facilities along W. Mission Road. Curb ramps at the project driveways would be reconstructed, if needed, with detectable surface warning tactiles (yellow truncated domes) as well as meeting all ADA requirements.

With implementation of the proposed sidewalk improvements, the overall pedestrian environment would be enhanced for both walkability and safety and would not result in any impacts to pedestrian facilities (CRA 2023a). No other offsite pedestrian improvements were recommended in the traffic study.

Additionally, based upon the analysis presented in Section 3.10.4, the project would not result in an inconsistency with the Mobility Element of the City's General Plan. The Local Transportation Analysis determined that the project would result in 874 total average daily trips (ADT). All study intersections and street segments are calculated to operate acceptably at LOS D or better with the addition of project and cumulative project traffic under Near Term 2025 and Horizon Year 2050 conditions with the exception of the segment of N. Rancho Santa Fe Road between SR-78 Eastbound Ramps and Descanso Avenue. This segment is forecasted to operate at LOS E with and without the proposed project in the Near Term 2025 and Horizon Year 2050 condition. The trips associated with the proposed project would not be enough to increase the volume/capacity ratio by 0.02, which is the threshold for roadways operating at LOS E or F (CRA 2023a).

Therefore, **no impact** related to a conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities is identified for the project.

Threshold #2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).

The *City's Transportation Impact Analysis (TIA) Guidelines* (San Marcos 2020a) provide several screening approaches to identify when a project should be expected to cause a less-than-significant

impact related to VMT. The City of San Marcos TIA Guidelines suggest that a detailed transportation VMT analysis applies to all land development projects, except those that meet at least one of the screening criteria. Relevant screening criteria for the proposed project is described below:

- Presumption of Less Than Significant Impact for Affordable Residential Development – Residential projects with 100% deed restricted affordable housing can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. If a project contains less than 100% affordable housing, the portion that is affordable should be screened out of requiring a detailed VMT analysis. Projects can only be screened out if they are located in parts of the city that have been identified by SANDAG and the City as Smart Growth Opportunity Areas. For mixed-use projects, this screening criteria should be applied to the residential component separately to determine if that portion of the project screens out of a detailed VMT analysis.
- Local-Serving Retail - Retail projects that have 50,000 square feet gross floor area or less can be presumed to have a less than-significant transportation impact and would not require a detailed VMT analysis. For a mixed-use project, this screening criteria should be applied to the retail/commercial component separately to determine if that portion of the project screens out of a detailed VMT analysis.
- Map-Based Screening for Residential and Office Projects – Residential and employment projects that are proposed in areas that generate VMT below adopted City thresholds can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. This determination must be made using SANDAG's online residential and employment VMT maps for existing year or model baseline year VMT (whichever is available at the time analysis is being conducted), which show census tracts in the city where the VMT is below the regional average. The following types of projects could be screened out using this approach:
    - Residential and office projects proposed in census tracts with residential VMT per capita below the City's threshold of 85% of the SANDAG regional average. A significant impact would occur if the project generates VMT per resident or worker greater than 85% of the regional average.
    - In order to utilize this screening approach, the project must incorporate similar land use characteristics to other projects in the census tract. For mixed-use projects, this screening criteria should be applied to the residential and employment components separately to determine if any portions of the project screen out of a detailed VMT analysis.

VMT Analysis Based upon the criteria provided above, the proposed project would be screened out from conducting a detailed VMT Analysis because of the following reasons (CRA 2023b):

- Presumption of Less Than Significant Impact for Affordable Residential Development – The proposed project includes an affordable housing component, and the six affordable housing units proposed are presumed to have less than significant VMT impacts;
- Local-Serving Retail - The commercial retail portion of the proposed project totals 4,000 s.f. and considered local-serving retail. Local-serving retail is presumed to have less than significant VMT impacts; and
- Map-Based Screening for Residential Projects – The project site is located within a census tract with a 12.5 VMT/capita based on SANDAG's online residential and employment VMT

maps, as shown in **Figure 3.15-1.** The 113-market rate residential units proposed by the project are located in a low VMT area (66.2% below the regional average) and are presumed to have a less than significant VMT impact (CRA 2023b).

Therefore, the proposed project is considered to be screened out of a detailed VMT analysis and may be presumed to cause a **less-than-significant** VMT impact.

Threshold #3: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

Site Access & Internal Circulation

The project would be located approximately 450 feet east of the N. Rancho Santa Fe Road and Capalina Road intersection in the City of San Marcos. The project site is currently vacant and is bordered by W. Mission Road on the north, Capalina Road to the south, abandoned/vacant development to the west, and commercial retail land uses to the east. The proposed project would restripe the centerline in Capalina Road to provide a two-way left turn lane. Project site access would be provided via two new project driveways, one at each end of the project site, along Capalina Road. A brief description of each of the two driveways is provided below:

- Project Driveway #1 is located at the western end of the project site along Capalina Road and would function with full access. This driveway serves as one of two entry points and provides access points to the project site from the west. This driveway is projected to operate at LOS B or better under all study scenarios.
- Project Driveway #2 is located at the eastern end of the project site along Capalina Road and would function with full access. This driveway serves as one of two entry points and provides access points to the project site from the east. This driveway is projected to operate at LOS B or better under all study scenarios.

The internal circulation network does not include any hazardous design features and the project does not propose any incompatible uses. The project's internal roadways are designed to provide safe movement of bicycle, pedestrian, and vehicle traffic through the project site. Internal roadways on the project site allow for two-way flow of vehicle traffic. One dead-end aisle is proposed at the northwest corner of the project site, which is designed to meet San Marcos Fire District and City driveway standards. Additionally, the following are included as project design features (CRA 2023b):

- Construct driveways in accordance with City and Fire District Standards.
- Install stop sign (R1-1) at both project driveways.
- Appropriate signage to warn drivers of pedestrian foot traffic.

Vehicle Queuing

A 95th percentile queue analysis was conducted to determine the extent of queueing at the project driveways as well as movements at intersections where the project contributes 20 or more daily vehicle trips. The queue analysis was conducted under Near-Term Year 2025 Base with Project conditions and Horizon Year 2050 with Project conditions. **Table 3.15-2** displays the 95th percentile queue analysis results for project driveway intersections under both analysis scenarios. Intersection queueing reports are provided in Appendix K of the Local Transportation Analysis (Appendix N of the EIR).

As shown in Table 3.15-2, the 95th percentile queues for turning movements are projected to fit within the available storage with the exception of the westbound left-turn movement on N. Rancho Santa Fe and Capalina Road. At most, 125 feet of 95th percentile queue would exceed storage length under Horizon Year 2050 with Project Conditions. As detailed in the project description, as part of the project design the applicant would restripe and extend the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road by approximately 125 feet. This would provide for adequate storage for the westbound left-turn movement at the intersection and provide safe left-turn movements at this intersection..

Table 3.15-2. Vehicle Queue Summary

Intersection	Control Type	Turning Movement	Peak Hour	Available Storage (feet)	Near-Term Year 2025 with Project Conditions		Horizon Year 2050 with Project Conditions	
					95th Percentile Queue (ft)[1]	Excess Queue (ft)	95th Percentile Queue (ft)[1]	Excess Queue (ft)
N. Rancho Santa Fe & W. Mission Rd	Signal	NBL	AM	180	100	0	125	0
			PM		150	0	175	0
		EBR	AM	160	75	0	100	0
			PM		75	0	125	0
		WBL	AM	310	225	0	250	0
			PM		250	0	275	0
N. Rancho Santa Fe & Capalina Rd	Signal	SBL	AM	195	50	0	75	0
			PM		75	0	125	0
		WBL	AM	100	200	100	225	125
			PM		175	75	125	25
Project Drwy #1 & Capalina Rd	SSSC	SBLR	AM	230	25	0	25	0
			PM		25	0	25	0
Project Drwy #2 & Capalina Rd	SSSC	SBLR	AM	140	25	0	25	0
			PM		25	0	25	0

Source: CRA 2023a.

Notes: (1) Queues are rounded to the nearest 25 feet to represent one vehicle length
SSSC = Side-Street Stop Controlled
NBL= Northbound Left
EBR= Eastbound Right
WBL= Westbound Left
SBL= Southbound Left
SBLR = Southbound Left and Right

Sight Distance Analysis

An intersection sight distance analysis was conducted for both proposed project driveways along Capalina Road. The City of San Marcos Intersection Sight Distance Guidelines, December 2, 2020, were utilized to evaluate intersection sight distances at the project driveways (City of San Marcos 2020b). The following two types of sight distances were evaluated:

- Stopping Sight Distance - The distance traveled in the time it takes a driver to recognize an object ahead, decide to stop, and then stop their vehicle.
- Corner Sight Distance - The distance a driver stopped on the minor road can see approaching vehicles on the major road before their line of sight is blocked by an obstruction near the intersection.

Table 3.15-3 displays the measured sight distance, the design speed, as well as the minimum intersection sight distance requirements. As shown, both proposed project driveways would meet the intersection sight distance requirements.

Table 3.15-3. Measured Sight Distances

Driveway	Type	Direction of Oncoming Traffic	Design Speed (MPH)	Minimum ISD (ft)	Measured ISD (ft)	Pass or Fail
Project Driveway #1 & Capalina Road	Stopping	Southbound	40	300	478	Pass
	Corner (Left)	Westbound	40	440	780	Pass
	Corner (Right)	Eastbound	40	380	478	Pass
Project Driveway #2 & Capalina Road	Stopping	Southbound	40	300	728	Pass
	Corner (Left)	Westbound	40	440	530	Pass
	Corner (Right)	Eastbound	40	380	728	Pass

Source: CRA 2023a.

In summary, the project does not include any hazardous design features or any incompatible uses, provides adequate sight distance, and has been designed to provide safe movement throughout and around the project site. As part of the project design, the applicant would restripe and extend the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road by approximately 125 feet. This would provide for adequate storage for the westbound left-turn movement at the intersection. Impacts will be **less than significant**.

Threshold #4: Result in inadequate emergency access.

The project has been designed to incorporate two project driveways. The project would not include any hazardous design features or any incompatible uses, provides adequate sight distance, and has been designed to provide safe movement throughout and around the project site. The project design has also been reviewed by the Fire Marshal and no issues related to inadequate emergency access were identified. Impacts would be **less than significant**.

3.15.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA

Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to transportation, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to hazards. All of the cumulative projects identified in Table 2-3 are considered in this cumulative analysis.

Cumulative Policy Impact

The related projects and other cumulative development in San Marcos would be subject to the same circulation-related programs, plans, ordinances, and policies as the proposed project. Cumulative projects would be required to demonstrate consistency with the SANDAG 2021 Regional Plan, San Marcos General Plan, San Marcos Bikeway Master Plan, and San Marcos TIA Guidelines, which guide development of transportation systems and circulation in the city. The cumulative projects primarily propose medium- to high-density residential and mixed-use development in areas with good transit connectivity and active transportation options, reducing dependence on automobiles and encouraging more active travel modes. As a result, cumulative impacts related to a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be **less than significant**.

Cumulative VMT Analysis

According to the City's TIA Guidelines (San Marcos 2020a) if a land use project (or a component of a mixed-use project) is screened out of requiring a detailed existing VMT analysis or if it falls below the existing VMT thresholds outlined in Table 2 of the Transportation Impact Analysis Guidelines, it would also result in a less than significant cumulative impact. Therefore, the proposed project's cumulative VMT impact would be **less than significant**.

Hazards Due to Design and Emergency Access

Site design hazards and emergency access are analyzed and addressed on a project-by-project basis. Each of the projects in Table 2-3 would be reviewed to ensure that the site design does not include any traffic related hazards and that there is adequate emergency access or required mitigation measures to reduce impacts. Therefore, impacts related to hazardous design and emergency access would be **less than significant**.

3.15.6 Mitigation Measures

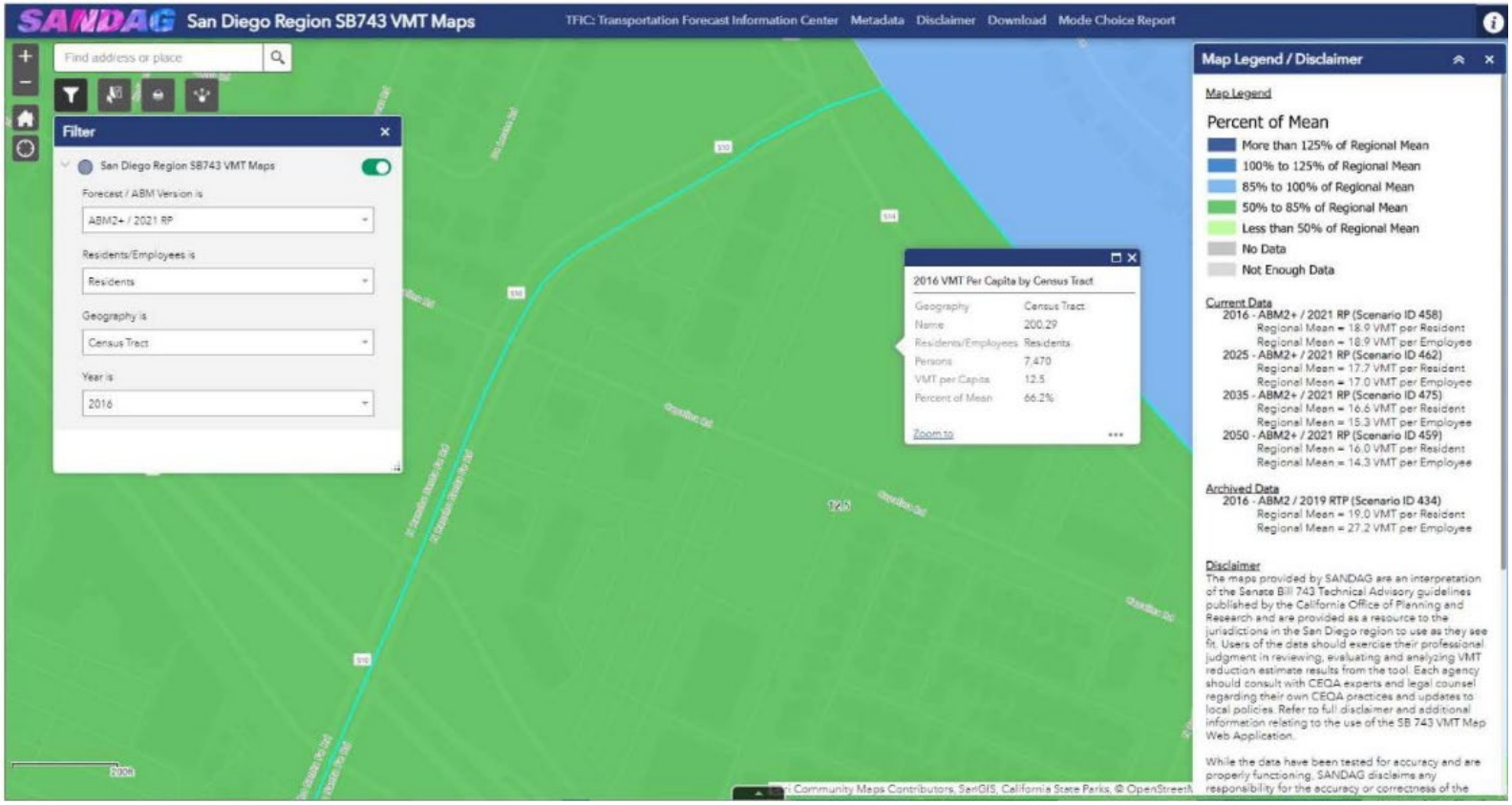
Based upon the analysis presented in Sections 3.15.4 and 3.15.5, impacts were determined to be less than significant. No mitigation measures are required.

3.15.7 Conclusion

Based upon the analysis presented in Section 3.15.4, the project would not have an impact related to a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Project impacts related to hazards due to a design feature, incompatible use or inadequate emergency access were determined to be less than significant. The applicant would restripe and extend the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road by approximately 125 feet. This would provide for adequate storage for the westbound left-turn movement at the intersection. The project would also restripe the centerline in Capalina Road to provide a two-way left turn lane. For all other intersections analyzed, there is adequate storage for turning movements. The project would also have a less than significant impact related to VMT based on the City's screening criteria.

Figure 3.15-1 Project Location within SANDAG SB 743 VMT Map



Source: CRA 2023b.

3.16Tribal Cultural Resources

Introduction

This section analyzes the potential impacts of the proposed project on tribal cultural resources. As defined by Public Resources Code Section 21074, a tribal cultural resource is a site, feature, place, and or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 1) either on or eligible for the California Register of Historic Resources (CRHR) or a local historic register, or 2) determined by the City, at its discretion to treat the resources as a tribal cultural resource (Public Resources Code Section 5024.1). Cultural resources are further analyzed in Section 3.4, Cultural Resources, of the Environmental Impact Report (EIR).

The analysis in this section is based upon the following report prepared by Dudek (2023c) as well as specific outreach and consultation with appropriate Tribes:

- *Archaeological Resources Inventory Report for the Capalina Apartments Project*, City of San Marcos, California (Dudek 2023c)

The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G and applicable State and Local regulations, including the City of San Marcos General Plan. The cultural resources study is included as **Appendix E** of the EIR and the General Plan is available on the City's web site.[19] **Table 3.16-1** summarizes the tribal cultural resources project- and cumulative- level impacts, by threshold.

Table 3.16-1. Tribal Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 – Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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).	Potentially Significant	No Impact	Mitigated to Less Than Significant
#2 – 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	Potentially Significant	No Impact	Mitigated to Less Than Significant

[19] http://www.san-marcos.net/work/economic-development/general-plan

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
California Native American tribe, and that is 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.			

3.16.1 Existing Conditions

This section provides information on the archeological context of the project site. It also provides information on the outreach and consultation efforts with local Tribes, as required by existing regulations.

Natural Setting

The project site is currently undeveloped, vacant land. Per the Phase I Environmental Site Assessment prepared for the project, the project site appeared to be vacant pastureland from prior to 1939 until approximately 1974, when the northwestern perimeter of the property appeared to be vacant, rough-graded land. By 1980, the project site appeared to be vacant, rough-graded land with what appeared to be an area graded for uses as a vehicle parking area on the southeastern portion of the property. By 1996, the property appeared to be vacant, weed-abated land. By 2005, a vehicle parking area appeared to be to be located on the southeastern perimeter of the subject property. By 2012, the vehicle parking area was removed and the property appeared to be vacant, weed-abated land (The Phase 1 Group 2022). Currently, the entire site is occupied with disturbed habitat with a few ornamental trees (Dudek 2023a).

Prehistoric Context

Evidence for continuous human occupation in the San Diego County region spans the last 12,000 years. Various attempts to parse out variability in archaeological assemblages over this broad time frame have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. This research employs a common set of generalized terms used to describe chronological trends in assemblage composition from an archaeological perspective: Paleoindian (pre-5500 BC), Archaic (8000 BC.–AD 500), Late Prehistoric (AD 500–1750), and Ethnohistoric (post-AD 1750). Native American Aboriginal lifeways did not cease at European contact. “Protohistoric” refers to the chronological trend of continued Native American Aboriginal lifeways at the cusp of the recorded historic period in the Americas. The tribal cultural context spans all of the archaeologically-based chronologies further described below. The following information on these periods is from the archaeological resources inventory report prepared for the project by Dudek (2023c) and is included as Appendix E.

Paleoindian Period (pre-5500BC)

Evidence for Paleoindian occupation in coastal Southern California is tenuous, especially considering that the oldest dated archaeological assemblages look nothing like the Paleoindian artifacts from the Great Basin. One of the earliest dated archaeological assemblages in coastal Southern California (excluding the Channel Islands) derives from P-37-004669 (CA-SDI-4669), in La Jolla. A human burial from P-37-004669 was radiocarbon dated to 9,590–9,920 years before present (approximately 95% probability) (Hector 2007). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of groundstone, battered cobbles, and expedient flake tools). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone tools. Prime examples of this pattern are sites that were studied by Emma Lou Davis (1978) on China Lake Naval Air Weapons Station near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (CA-MNO-679)—a multicomponent fluted point site, and CA-MNO-680—a single component Great Basin stemmed point site (Basgall et al. 2002). At CA-MNO-679 and CA-MNO-680, groundstone tools were rare while finely made projectile points were common.

Turning back to coastal Southern California, the fact that some of the earliest dated assemblages are dominated by processing tools runs counter to traditional notions of mobile hunter–gatherers traversing the landscape for highly valued prey. Evidence for the latter—that is, typical Paleoindian assemblages—may have been located along the coastal margin at one time, prior to glacial desiccation and a rapid rise in sea level during the early Holocene (pre-7500 BP) that submerged as much as 1.8 kilometers of the San Diego coastline. If this were true, however, it would also be expected that such sites would be located on older landforms near the current coastline. Some sites, such as P-37-000210 (CA-SDI-210) along Agua Hedionda Lagoon, contained stemmed points similar in form to Silver Lake and Lake Mojave projectile points (pre-8000 BP) that are commonly found at sites in California's high desert (Basgall and Hall 1990). P-37-000210 yielded one corrected radiocarbon date of 8520–9520 BP (Warren et al. 2004). However, sites of this nature are extremely rare and cannot be separated from large numbers of milling tools that intermingle with old projectile point forms.

Warren et al. (2004) claimed that a biface manufacturing tradition present at the Harris site complex P-37-000149 (CA-SDI-149) is representative of typical Paleoindian occupation in the San Diego County region that possibly dates between 10,365 and 8200 BC (Warren et al. 2004, p. 26). Termed San Dieguito (Rogers 1945), assemblages at the Harris site are qualitatively distinct from most others in the San Diego County region because the site has large numbers of finely made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (Warren 1964, 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos' interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the San Diego County region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely

made bifaces and formal flake tools implies that relatively large amounts of time were spent for tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies non-San Dieguito Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents a distinct economic strategy from non-San Dieguito assemblages.

If San Dieguito truly represents a distinct socioeconomic strategy from the non-San Dieguito Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in southern California deserts, wherein hunting-related tools are replaced by processing tools during the early Holocene (Basgall and Hall 1993).

Archaic Period (8000 BC – AD 500)

The more than 2500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in the San Diego County region. If San Dieguito is the only recognized Paleoindian component in the San Diego County region, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the San Diego County region (Hale 2001, 2009).

The Archaic pattern is relatively easy to define with assemblages that consist primarily of processing tools: millingstones, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the San Diego County region, with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurs until the bow and arrow is adopted at around AD 500, as well as ceramics at approximately the same time (Griset 1996; Hale 2009). Even then, assemblage formality remains low. After the bow is adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millingstones and handstones decrease in proportion relative to expedient, unshaped groundstone tools (Hale 2009). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complimented only by the addition of the bow and ceramics.

Late Prehistoric Period (AD 500-1769)

The period of time following the Archaic and prior to Ethnohistoric times (AD 1750) is commonly referred to as the Late Prehistoric (M. Rogers 1945; Wallace 1955; Warren et al. 2004). However, several other subdivisions continue to be used to describe various shifts in assemblage composition, including the addition of ceramics and cremation practices. In northern San Diego County, the post-AD 1450 period is called the San Luis Rey Complex (True 1978). Rogers (1929) also subdivided the last 1,000 years into the Yuman II and III cultures, based on the distribution of ceramics. Despite these regional complexes, each is defined by the addition of arrow points and ceramics, and the widespread use of bedrock mortars. Vagaries in the appearance of the bow and arrow and ceramics make the temporal resolution of the San Luis Rey complex difficult. For this reason, the term Late Prehistoric is well-suited to describe the last 1,500 years of prehistory in the San Diego region.

Temporal trends in socioeconomic adaptations during the Late Prehistoric period are poorly understood. This is partly because the fundamental Late Prehistoric assemblage is very similar to the Archaic pattern, but includes arrow points and large quantities of fine debitage from producing arrow points, ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces; bowl mortars are actually rare in the San Diego County region. Some argue that the Ethnohistoric intensive acorn economy extends as far back as AD 500 (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred prior to AD 1400. True (1980) argued that acorn processing and ceramic use in the northern San Diego region did not occur until the San Luis Rey pattern emerged after approximately AD 1450.

Ethnohistoric (post-AD 1769)

Early descriptions of the lifeways of Southern California ethnohistoric groups were provided by explorers, missionaries, administrators, and other travelers, who gave particular attention to the coastal populations (Boscana 1846; Fages 1937; Geiger and Meighan 1976; Harrington 1934; Laylander 2000). Subsequent ethnographers in the early twentieth century were able to give much more objective, detailed, and penetrating accounts. Most of the ethnographers attempted to distinguish between observations of the customs of surviving Native Americans and orally transmitted or inferred information concerning the lifeways of native groups prior to European intrusion into the region. The second of these subjects provides a terminal baseline for discussing the cultures of the region's prehistory. Despite the relatively rich ethnographic record, attempts to distinguish between the archaeological residues that were produced by the linguistically unrelated but culturally similar Luiseño and Ipai/Kumeyaay have been largely unsuccessful (Pigniolo 2004; True 1966).

The first systematic ethnographic work in California was done in 1871 and 1872 by Stephen Powers (Heizer 1978); in 1877, Powers collected and printed his ethnographic observations in Tribes of California (Powers 1877). Prior to the work of Powers, there were limited records and accounts that might be broadly considered as ethnohistorical data, such as Boscana (1846). At the beginning of the twentieth century, Alfred L. Kroeber and others began four decades of systematic documentation of tribal ethnographies. Kroeber's (1925) monumental work on the Indians of California continues to be an authoritative source of information. It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of pre-contact, Aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. As Robert F. Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California. Nonetheless, the enormous value of the ethnographies done under Kroeber's guidance is obvious. The major sources for this review include Lowell John Bean and Florence C. Shipek (1978), Kroeber (1925), Philip S. Sparkman (1908), and Raymond White (1963).

San Marcos is situated within the ethnohistoric territory of the Native American Luiseño cultural group, according to Kroeber's study (1925; see also Rivers 1993). The Luiseño language belongs to the Cupan group of the Takic language branch of the Uto-Aztecan language family. Luiseño is a term given to Native Americans under the administration of Mission San Luis Rey, and later applied specifically to the Payomkawichum ethnic nation who were present in the region where the mission was founded. Meaning the "western people," the name Payomkawichum can also be applied to the closely related coastal Luiseño who lived north of the mission.

Luiseño territory was situated in the north half of San Diego County and the western edge of Riverside County. Their lands encompassed the southern Santa Margarita Mountains and the Palomar Mountains, and their foothills to the Pacific Ocean. The territory extended eastward into the San Jacinto Valley and the western foothills of the San Jacinto Mountains. Their neighbors to the were the Juaneño (Acjachemen) who spoke a Luiseño dialect, the Cahuilla and Cupeño to the east who spoke other Takic Cupan languages, and the Ipai (Kumeyaay) to the south who spoke a California-Delta Yuman language.

The Luiseño resided in permanent villages and associated seasonal camps. Village population ranged from 50–400 with social structure based on lineages and clans. A single lineage was generally represented in smaller villages, while multiple lineages and a dominant clan presided in larger villages. Each clan/village owned a resource territory and was politically independent, yet maintained ties to others through economic, religious, and social networks in the immediate region. There were contact period villages in the vicinity of this segment, near the towns of Vista, San Marcos, and Escondido, but researchers have been unable to place rancheria names from the mission registers with these locations.

Luiseño geographical names are very numerous; small tracts with distinguishing features may be named, or there may be a name for a small portion of a tract, or names for a large tract of country (Sparkman 1908). Some geographical names may be descriptive and some names are of old village sites noted to be located near modern localities and settlements; for example, Palimai is associated with the slough at mouth of Agua Hedionda Creek (Sparkman 1908). The Project area is located south Agua Hedionda Creek and north of San Marcos Creek. Kroeber has noted place names; north of Agua Hedionda Creek is Palamai, south and of San Marcos Creek is Hakuti, and east of San Marcos Creek is Shikape (Kroeber 1925).

Like other Indigenous California groups, the primary food staple was the acorn (Bean and Shipek 1978), supplemented by other plant resources, fish, shellfish, waterfowl, and marine and terrestrial mammals. Villages were situated near reliable sources of water, needed for the daily leaching of milled acorn flour. Other plant foods included pine nuts and grass seeds, manzanita, sunflower, sage, chia, lemonade berry, wild rose, holly-leaf cherry, prickly pear, and lamb's quarter. Large and small prey included deer, antelope, rabbit, jackrabbit, wood rat, mice, and ground squirrel, as well as quail, ducks, and other birds. Fish, such as trout, were caught in rivers and creeks.

The first direct European contact with the Luiseño occurred in July 1769 with the Spanish expedition led by Gaspar de Portolá. During the next six years, eight missions and forts were founded north and south of Luiseño territory. In 1776, Mission San Juan Capistrano was founded less than 10 miles north, and the populations of five northern Luiseño villages had been halved within 15 years. In 1798, Mission San Luis Rey was established within Luiseño territory, and the proselytizing among the Payomkawichum began in earnest.

Several Luiseño leaders signed the statewide 1852 treaty, locally known as the Treaty of Temecula (an interior Luiseño village), but the U.S. Congress never ratified it. By 1875, however, reservations for the Luiseño were established in the Palomar Mountains and nearby valleys, including Pala, Pauma, Rincon, Pechanga, and La Jolla.

Records Search

A detailed records search including previous cultural resources report, previously recorded cultural resources and archival research was conducted for the project. Please see Section 3.4, Cultural Resources, for a summary.

Tribal Correspondence and Coordination

On September 16, 2022, Dudek requested a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC) for the project area. The SLF consists of a database of known Native American resources. The NAHC replied on November 9, 2022 indicating that the SLF search came back negative. The NAHC provided a list of Native American tribes and individuals/organizations with traditional geographic association that might have knowledge of cultural resources in this area.

Outreach letters were mailed November 14, 2022, to all Native American representatives included on the NAHC contact list. These letters attempted to solicit additional information relating to Native American resources that may be impacted by the project. Native American representatives were requested to define a general area where known resources intersect the project area. Two responses have been received to date.

The Rincon Band of Luiseño Indians responded on December 12, 2022, stating that the project area is located within their Traditional Use Area and Specific Area of Historic interest and the potential exists that the project may impact Traditional Cultural Resources (TCRs) or Traditional Cultural Properties (TCPs). They recommend archaeological and tribal monitoring for any ground disturbing activities.

The Pechanga Band of Indians responded on December 23, 2022, stating that the project is located near a TCP and three Ancestral Placename Villages with 18 previously recorded sites within one mile of the project. The Pechanga Band of Indians pointed out that Agua Hedionda Creek is located near the project boundary, which is concerning as they buried their Ancestors near long-term waters, and native soils likely remain intact beneath the plow-zone, meaning here is a high potential to encounter sensitive subsurface resources during ground-disturbing activities associated with the project. They are recommending monitoring by a San Diego County qualified archaeologist and a professional Pechanga Tribal Monitor during earthmoving activities.

The City sent out notices to Tribes consistent with the requirements of Senate Bill (SB) 18 and Assembly Bill (AB) 52. SB 18 letters were sent on December 7, 2022 and AB 52 letters were sent on February 23, 2023.

The Rincon Band of Luiseño Indians requested consultation on January 19, 2023. The City consulted with the Rincon Band and a close-out consultation letter was received on June 12, 2023 stating concurrence with the City's standard mitigation measures.

The San Luis Rey Band of Mission Indians requested consultation on March 6, 2023. The City consulting with the San Luis Rey Band and a close-out letter was received on September 22, 2023 stating concurrence with the City' standard mitigation measures.

The Pechanga Band of Indians requested consultation on March 15, 2023. The City provided additional project information to the Tribe and is waiting for comments and/or the close-out consultation letter.

Archaeological (Prehistoric) Resources

As detailed in Section 3.4, Cultural Resources, of the EIR, Dudek archaeologist Makayla Murillo conducted an intensive level pedestrian survey of the proposed project area on October 12, 2022. Saving Sacred Sites Native American monitor Jessica Alexander participated in the pedestrian survey. All survey work was conducted employing standard archaeological procedures and techniques consistent with the Secretary of the Interior Standards. Five-meter interval survey transects were

conducted in an east-west direction for the project area. Within the transects, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials.

The project area is relatively flat and undeveloped with a small east facing slope along the western boundary. Some disturbances were observed, such as stockpiled imported rock on the northwesternmost portion of the project area. Ground visibility was fair (25-50%) in areas where the ground surface was obscured by vegetation. Approximately 75% of the project area was obscured by dead grass and a few dispersed palm trees. Modern debris (e.g., refuse, plastic fragments, irrigation pipes, glass fragments) is strewn throughout the project area. The pedestrian survey did not identify any cultural resources within the project area.

3.16.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to tribal cultural resources. The analysis of tribal cultural resources is a State requirement under CEQA, as required by AB 52, described below. The City also has goals and policies in the General Plan Conservation and Open Space Element related to cultural resources, as described below.

State

Senate Bill 18

SB 18, approved in 2004, amends the California Civil Code and the California Government Code, requiring cities and counties to contact and consult with California Native American tribes prior to adopting or amending any general plan or specific plan, or designating land as open space in order to preserve or mitigate impacts to specified Native American places, features and objects that are located within the city's or county's jurisdiction. SB 18 also requires cities and counties to hold in strict confidence any information about the specific identity, location, character, or use of these resources. In 2005, the Office of Planning and Research published Tribal Consultation Guidelines to guide cities and counties on the process of engaging in consultation in accordance with SB 18. The Native American Heritage Commission maintains a list of California Native American Tribes with whom cities and counties must consult pursuant to SB 18.

Assembly Bill 52

AB 52 was approved in 2014 and adds new requirements regarding consultation with California Native American Tribes and consideration of tribal cultural resources. The law went into effect on July 1, 2015, and after that date, if requested by a California Native American Tribe, lead agencies must consult prior to the release of a Negative Declaration, Mitigated Negative Declaration or Draft EIR.

Local

San Marcos General Plan Conservation and Open Space Element

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of archaeological and historic resources. The following goals and policies apply to the project:

- Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.

- Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.
  - Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.
  - Policy COS-11.2: Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction offsite, and/or photo-preservation.
  - Policy COS-11.3: Identify opportunities for adaptive reuse of historic sites and buildings to preserve and maintain their viability.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7, the project is consistent with the applicable General Plan goals and policies pertaining to cultural resources.

San Marcos Archaeological and Historical Resources Consultant Guidelines

The City of San Marcos published guidelines for archaeological and historical resources consultants in January 2023. The guidelines are generally meant to aid third party consultants who prepare archaeological or architectural history inventories, surveys, evaluations, and other technical documents. These guidelines include information pertaining to the minimum qualifications, records searches, tribal outreach, pedestrian surveys, reporting, research design, findings, discussion and evaluations, management conclusions, references, and appendices of inventories, surveys, evaluations, and other technical documents (City San Marcos 2023). Dudek prepared the archaeological resources inventory report in accordance with these guidelines.

3.16.3 Thresholds of Significance

The determination of significance for tribal cultural resources is based on *CEQA Guidelines Appendix G*. Impacts to tribal cultural resources would be significant if the proposed project would:

- Threshold #1: Cause a substantial adverse change in the significance of a tribal cultural resource that is 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

- Threshold #2: Cause a substantial adverse change in the significance of a tribal cultural resource that is 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.

3.16.4 Project Impact Analysis

Project grading activities will result in ground disturbance in those areas of the project site proposed for development. Ground disturbing activities can result in impacts to tribal cultural resources if they are present on the project site. Mitigation measures have been identified in Section 3.4, Cultural Resources, to reduce the potential to impacts to unknown cultural resources to below a level of significance (MM CR-1 through MM-CR-4). The following analysis discusses the potential for the project to have on tribal cultural resources.

Threshold #1: Cause a substantial adverse change in the significance of a tribal cultural resource that is 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).

Based upon the cultural resources study prepared for the project (Dudek 2023c) and consultation with local tribes, the project site does not contain any known tribal cultural resources that are listed or eligible for listing in the CRHR or in a local register of historical resources. However, as described in Section 3.4, Cultural Resources, and as identified above, impacts to unknown subsurface archaeological resources may occur on the project site. Therefore, the project has the potential to disturb unidentified archeological resources during project grading (Impact CR-1). MM-CR-1through MM-CR-3 provide for the presence of archaeological and Native American monitors during ground disturbing activities that would be able to identify any previously unidentified cultural resources, to prevent inadvertent disturbance of any intact cultural deposits that may be present. Should any resources be identified, implementation of mitigation measures MM-CR-1 through MM-CR-3 would ensure proper handling and treatment of such resources by providing for a proper evaluation to determine whether additional archaeological work is necessary. To further ensure impacts to Native American archaeological resources are protected, implementation of mitigation measures MM-CR-1 through MM-CR-4 provides additional protections for significant resources and describes the process for proper treatment and handling to ensure impacts are minimized. Implementation of this mitigation would reduce potential project-level impacts to tribal cultural resources **to below a level of significance**.

Threshold #2: Cause a substantial adverse change in the significance of a tribal cultural resource that is 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 City has not identified any cultural resources to be present on the project site pursuant to Public Resources Code Section 5024.1. Based upon the cultural resources study prepared for the project (Dudek 2023c) and consultation with local tribes, the project site does not contain any known tribal cultural resource that are significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. However, as described in Section 3.4, Cultural Resources, and as identified above, impacts to unknown subsurface archaeological resources may occur on the project site. Therefore, the project has the potential to disturb unidentified archeological resources during project

grading (Impact CR-1). Mitigation measures MM-CR-1 through MM-CR-3 provide for the presence of archaeological and Native American monitors during ground disturbing activities that would be able to identify any previously unidentified cultural resources, to prevent inadvertent disturbance of any intact cultural deposits that may be present. Should any resources be identified, implementation of mitigation measures MM-CR-1 through MM-CR-3 would ensure proper handling and treatment of such resources by providing for a proper evaluation to determine whether additional archaeological work is necessary. To further ensure impacts to Native American archaeological resources are protected, implementation of mitigation measures MM-CR-1 through MM-CR-4 provides additional protections for significant resources and describes the process for proper treatment and handling to ensure impacts are minimized. Implementation of this mitigation would reduce potential project-level impacts to tribal cultural resources **to below a level of significance**.

3.16.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to tribal cultural resources, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts on tribal cultural resources.

While no resources were identified on the project site during the cultural resources reconnaissance, it was determined that there could be a potential for unidentified resources to be encountered subsurface during project grading. Other cumulative projects would be required to assess the potential for impact to archaeological resources and provide mitigation measures or avoidance measures to reduce significant impacts to cultural resources consistent with the requirements of CEQA and the City. Additionally, the lead agency is required to consult with tribes pursuant to the requirements of SB 18 and/or AB 52. The City requires standard conditions of approval related to construction monitoring by an archeologist to ensure there are no inadvertent impacts to archeological resources. Cumulative impacts would be **less than significant**.

3.16.6 Mitigation Measures

Mitigation measures MM-CR-1 through MM-CR-4 in Section 3.4, Cultural Resources, would reduce potential tribal cultural resources impacts to below a level of significance.

MM-CR-1 Pre-Excavation Agreement: Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall enter into a Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement) with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City. The purpose of the Pre-Excavation Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the TCA Tribe for the protection, treatment, and repatriation of Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground

disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the TCA Tribe requirements for protocols and protection of tribal cultural resources that were agreed to during the tribal consultation.

The landowner shall relinquish ownership of all non-burial related tribal cultural resources collected during construction monitoring and from any previous archaeological studies or excavations on the project site to the TCA Tribe for proper treatment and disposition per the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Pre-Excavation Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

MM-CR-2 Construction Monitoring: Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner or Grading Contractor shall provide written documentation (either as signed letters, contracts, or emails) to the City's Planning Division stating that a Qualified Archaeologist and Traditionally and Culturally Affiliated Native American monitor (TCA Native American monitor) have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Pre-Excavation Agreement.

The Qualified Archaeologist and TCA Native American monitor shall be invited to attend all applicable pre-construction meetings with the General Contractor and/or associated subcontractors to present the construction monitoring program. The Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that occur in areas of native soil or other permeable natural surfaces that have the potential to unearth any evidence of potential archaeological resources or tribal cultural resources. In areas of artificial paving, the Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb more than six inches below the original pre-project ground surface to identify any evidence of potential archaeological or tribal cultural resources. No monitoring of fill material, existing or imported, will be required if the General Contractor or developer can provide documentation to the satisfaction of the City that all fill materials being utilized at the site are either: 1) from existing commercial (previously permitted) sources of materials; or 2) are from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the Qualified Archaeologist and TCA Native American monitor.

The Qualified Archaeologist and TCA Native American monitor shall maintain ongoing collaborative coordination with one another during all ground disturbing activities. The requirement for the construction monitoring program shall be noted on all applicable construction documents, including demolition plans, grading

plans, etc. The Applicant/Owner or Grading Contractor shall provide written notice to the Planning Division and the TCA Tribe, preferably through e-mail, of the start and end of all ground disturbing activities.

Prior to the release of any grading bonds, or prior to the issuance of any project Certificate of Occupancy, an archaeological monitoring report, which describes the results, analysis, and conclusions of the construction monitoring shall be submitted by the Qualified Archaeologist, along with any TCA Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Manager for approval. Once approved, a final copy of the archaeological monitoring report shall be retained in a confidential City project file and may be released, as a formal condition of Assembly Bill (AB) 52 consultation, to San Luis Rey Band of Mission Indians, Rincon Band of Luiseño Indians, Pechanga Band of Indians, or any parties involved in the project specific monitoring or consultation process. A final copy of the report, with all confidential site records and appendices, will also be submitted to the South Coastal Information Center after approval by the City.

MM-CR-3 Unanticipated Discovery Procedures: Both the Qualified Archaeologist and the TCA Native American monitor may temporarily halt or divert ground disturbing activities if potential archaeological resources or tribal cultural resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist, in consultation with the TCA Native American monitor) will be minimally documented in the field. All unearthed archaeological resources or tribal cultural resources will be collected, temporarily stored in a secure location (or as otherwise agreed upon by the Qualified Archaeologist and the TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the archaeological resources or tribal cultural resources are considered potentially significant by the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor, then the City and the TCA Tribe shall determine, in consultation with the Applicant/Owner and the Qualified Archaeologist, the culturally appropriate treatment of those resources.

If the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor cannot agree on the significance or mitigation for such resources, these issues will be presented to the Planning Division Manager for decision. The Planning Division Manager shall make a determination based upon the provisions of CEQA and California Public Resources Code Section 21083.2(b) with respect to archaeological resources and California Public Resources Section 21704 and 21084.3 with respect to tribal cultural resources, and shall take into account the religious beliefs, cultural beliefs, customs, and practices of the TCA Tribe.

All sacred sites, significant tribal cultural resources, and/or unique archaeological resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible

by the City as the Lead Agency, then the City shall require additional culturally appropriate mitigation to address the negative impact to the resource, such as, but not limited to, the funding of an ethnographic study and/or a data recovery plan, as determined by the City in consultation with the Qualified Archaeologist and the TCA Tribe. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation and the drafting and finalization of any ethnographic study and/or data recovery plan, and/or other culturally appropriate mitigation. Any archaeological isolates or other cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site (or as otherwise agreed upon by the Qualified Archaeologist and TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the TCA Native American monitor.

If a data recovery plan is authorized as indicated above and the TCA Tribe does not object, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. If the Qualified Archaeologist collects such resources, the TCA Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the TCA Native American monitor may, at their discretion, collect said resources for later reburial or storage at a local curation facility, as described in the Pre-Excavation Agreement.

In the event that curation of archaeological resources or tribal cultural resources is required by a superseding regulatory agency, curation shall be conducted by an approved local facility within San Diego County and the curation shall be guided by California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections. The City shall provide the Applicant/Owner final curation language and guidance on the project grading plans prior to issuance of the grading permit, if applicable, during project construction. The Applicant/Owner shall be responsible for all repatriation and curation costs and provide to the City written documentation from the TCA Tribe or the curation facility, whichever is most applicable, that the repatriation and/or curation have been completed.

MM-CR-4 Human Remains: As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98.

If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by State law, the Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner recognizes the remains to be Native American, and not under his or her jurisdiction, then he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission will make a determination as to the Most Likely Descendent, who shall be afforded 48 hours from the time access is granted to the discovery site to make recommendations regarding culturally appropriate treatment.

If suspected Native American remains are discovered, the remains shall be kept in situ (in place) until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendent is identified, at which time the archaeological examination of the remains shall only occur on site in the presence of the Most Likely Descendent. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendant are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

3.16.7 Conclusion

Based upon the cultural resources study prepared for the project (Dudek 2023c) and consultation with local tribes pursuant to SB 18 and AB 52, the project site does not contain any known tribal cultural resource that are listed or eligible for listing in the CRHR or in a local register of historical resources. However, as described in Section 3.16.4, impacts to unknown subsurface archaeological resources may occur on the project site. Therefore, the proposed project has the potential to disturb unidentified archeological resources during project grading. Mitigation is required to reduce potential impacts to unknown subsurface resources. Mitigation measures MM-CR-1 through MM-CR—3 provide for the presence of archaeological and Native American monitors during ground disturbing activities that would be able to identify any previously unidentified cultural resources, to prevent inadvertent disturbance of any intact cultural deposits that may be present. Should any resources be identified, implementation of Mitigation measures MM-CR-1 through MM-CR-3 would ensure proper handling and treatment of such resources by providing for a proper evaluation to determine whether additional archaeological work is necessary. To further ensure impacts to Native American archaeological resources are protected, implementation of Mitigation measures MM-CR-1 through MM-CR–3 and MM-CR-4 provides additional protections for significant resources and describes the process for proper treatment and handling to ensure impacts are minimized. Implementation of this mitigation would reduce potential project-level impacts to tribal cultural resources to below a level of significance.

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3.17 Utilities and Service Systems

Introduction

This section identifies the existing service providers for utilities and service systems, including water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities and analyzes the ability of these providers to serve the proposed project based upon current utility infrastructure. A detailed energy consumption analysis is included in Section 3.5, Energy, of this EIR.

The analysis in this section relies on the following documents, which are included as **Appendices Q.1 and Q.2 of the EIR**[20]:

- *Capalina Apartments Water and Sewer Study*, Final Technical Memorandum, prepared by Vallecitos Water District, October 23, 2023.
- *Water and Wastewater Capital Facility Fees for Capalina Apartments (APN 219-115-33)*. Letter to City of San Marcos, dated October 31, 2022.

The Draft Water and Sewer Study, prepared by the Vallecitos Water District (VWD) considered water demand and sewage generation increases due to the proposed General Plan Amendment and development from the proposed project. The Draft Water and Sewer Study also analyzed the ability of VWD's infrastructure to serve the proposed project and made recommendations for the capital improvements for demand generated by the proposed project.

Table 3.17-1 summarizes the utilities and service system analysis, by threshold.

Table 3.17-1. Utilities and Service Systems Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 - Require or result in the relocation of reconstruction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition	Less than Significant	Less than Significant	Less than Significant Without Mitigation

[20] Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
to the provider's existing commitments?			
#4 – Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#5 – Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.17.1 Existing Conditions

The following provides background information about the water, wastewater, solid waste, and other utility service providers that will serve the proposed project.

Water Service Area

The project lies within VWD for both water and wastewater services. VWD provides water, wastewater, and reclamation services to a population of more than 108,000 within its 45-square-mile boundary including: San Marcos, the community of Lake San Marcos, parts of Carlsbad, Escondido and Vista and other unincorporated areas in north San Diego County. VWD also wholesales recycled water to the City of Carlsbad and the Olivenhain Municipal Water District.

The project site lies completely within VWD's 855 Pressure Zone. The project site is currently undeveloped. Potable water is delivered to the project area by an existing 8-inch water main in Capalina Road.

Water Supply

VWD is a member of the San Diego County Water Authority (SDCWA), thus eligible to purchase water transported into San Diego County via the massive aqueducts of SDCWA and its wholesaler, Metropolitan Water District (MWD) of Southern California. To understand water supply availability for the proposed project, it is important to begin with MWD and follow the water supply through these agencies.

MWD was formed in 1928 to develop, store and distribute supplemental water to southern California for domestic and municipal purposes. MWD consists of 26-member agencies and has a service area covering six counties, 5,200 square miles, and 19 million people. MWD obtains water from local sources as well as the Colorado River (via the Colorado River Aqueduct) and the Sacramento-San Joaquin Delta (via the State Water Project). MWD's Urban Water Management Plan (UWMP) documents the availability of these supplies to meet future demands. With a projected annual water demand of 5,374,000 acre-feet per year for 2045, the MWD UWMP concludes that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2045 under normal, single dry, and multiple dry water years (MWD 2021).

The MWD water demands through normal, single dry year, and multiple dry years are shown below in Table 3.17-2.

Table 3.17-2. Metropolitan Water District Total Water Demands in Acre Feet Per Year

Year	2025	2030	2035	2040	2045
Average Year	4,925,000	5,032,000	5,156,000	5,261,000	5,374,000
Single Dry Year	4,929,000	5,037,000	5,156,000	5,265,000	5,374,000
Multiple Dry Years	4,877,000	5,064,000	5,182,000	5,299,000	5,410,000

Source: MWD 2020 Urban Water Management Plan (MWD 2021).

SDCWA is the largest member agency of MWD and supplies 75 to 95 percent of the water needs in San Diego County. 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. These regional growth projections are based on the San Diego Association of Governments Series 14 Regional Growth Forecast, developed for its 2019 Federal Regional Transportation Plan adopted by San Diego Association of Governments' Board of Directors on October 25, 2019. In fiscal year 2020, total water demand in the SDCWA's service area was 463,128 acre-feet, of which 92% was for municipal and industrial use and 8% was for agricultural water use. By 2045, the SDCWA's annual water demands are projected to reach 630,771 acre-feet. This projection accounts for planned future water conservation savings (SDCWA 2021).

SDCWA is historically the largest purchaser of MWD water; however, as SDCWA and its member agencies have increased their locally controlled water resources and investments in water use efficiency, SDCWA purchases have declined. In fiscal year 2020, SDCWA purchased 62,852 acre-feet, or about 6% of all the water MWD sold. SDCWA's UWMP assessed water reliability from 2025 through 2045 and determined that there are sufficient supplies to meet projected demands under Single Dry-Year and Multiple Dry-Year conditions (SDCWA 2021).

According to the VWD Master Plan Report, VWD imports about 75% of its water supply from SDCWA. The rest of VWD's water supply is provided by the recently completed Carlsbad seawater desalination plant as well as up to 2,200 acre-feet per year of supply from the Olivenhain MWD. Currently, VWD delivers water through 356 miles of pipeline and operates 10 pump stations and 19 potable water storage reservoirs ranging in size from 350,000 gallons to 40 million gallons (MG). VWD's total operational storage capacity is 121.6 MG. During Fiscal Year 2013-2014, VWD provided an average of 14.8 million gallons per day (MGD) to approximately 21,900 meters serving residential, commercial, light industrial, institutional, construction, landscape irrigation and agricultural uses (VWD 2018).

Wastewater Service Area

VWD provides wastewater and reclamation services to a 23-square mile area serving approximately 93,000 people as well as commercial, light industrial, institutional, construction, landscape irrigation, and agricultural customers. Their service area includes the City of San Marcos, parts of the cities of Carlsbad, Escondido, and Vista, and unincorporated areas within the County of San Diego. In addition, VWD wholesales recycled water to the City of Carlsbad and the Olivenhain MWD. Within its service area, there are some rural areas that still use septic systems for sewage disposal, thus VWD's current 23-square mile sewer service area is much smaller in size than its water service area, although VWD's

sphere of influence is equal in size for both. VWD has over 20,000 sewer service connections with 4 lift stations and approximately 250 miles of pipeline (VWD 2018).

VWD would provide the proposed project's wastewater service. The project site is completely within VWD sewer shed 21C (VWD 2023). The project site is currently undeveloped. Sewer service is provided to the project area by an existing 8-inch sewer mainline in Capalina Road.

Wastewater Flows

The VWD 2018 Master Plan includes a wastewater system analysis assessing existing and projected wastewater flows, existing and projected capacity and needed capital improvements.

Table 3.17-3 presents the existing and projected future average wastewater flows for VWD's service area at 5-year increments from the base year of 2014 to 2035 and ultimate buildout conditions. These interim flow projections were estimated based upon SANDAG's growth forecasts for the region that were available at the time of the Master Plan's preparation (VWD 2018). As shown in Table 3.17-3, VWD's 2014 average daily wastewater flow was 7.5 MGD. The average annual flow projection for the ultimate condition is 14.4 MGD. This total represents the maximum potential flow based on allowable land uses and existing flows. While the ultimate flow is potentially higher, continued conservation and water use efficiency would delay reaching ultimate conditions (VWD 2018).

Wastewater Infrastructure and Capacity

VWD's sewer service area is divided between two principal drainage basins which are named based on the treatment facility which serves it. The treatment facilities used by VWD are the Meadowlark Water Reclamation Facility (MRF) and the Encina Water Pollution Control Facility (EWPCF). The existing wastewater collection system includes treatment facilities, major conveyance facilities, gravity mains, trunk sewers, lift stations, siphons, and force mains. VWD is able to recycle up to 74% of the wastewater generated in the service area.

Solids Treatment Capacity

The EWPCF is a regional treatment facility located in the City of Carlsbad with a treatment capacity of up to 40.51 MGD. VWD currently owns 10.47 MGD of solids treatment capacity at EWPCF. MRF does not have solids treatment capacity and therefore all solids are treated at the EWPCF. As shown in Table 3.17-3, VWD's 2014 average daily wastewater flow was 7.5 MGD. The ultimate average wastewater flow identified in the 2018 VWD Master Plan is 14.4 MGD, resulting in a projected solids treatment capacity deficiency of 3.93 MGD (VWD 2023).

Table 3.17-3. Projected Wastewater Flows within VWD Service Area

Year	Average Annual Flows (MGD)	Peak Dry Weather Flows (MGD) (1)	Peak Wet Weather Flows (MGD) (1)
Existing 2014	7.5	11.7	17.5
2020	8.7	13.2	20.0
2025	9.5	14.2	21.6
2030	9.6	14.4	21.9
2035	9.6	14.4	22.0

Year	Average Annual Flows (MGD)	Peak Dry Weather Flows (MGD) (1)	Peak Wet Weather Flows (MGD) (1)
Ultimate	14.4	20.2	31.7
Ultimate w/ NTA (2)	15.2	21.2	33.4

Source: VWD 2018 Master Plan, page 7-19.

Notes: (1) Peak flows were estimated by applying District Peaking Curves as presented in Chapter 6 of the 2018 Master Plan.
(2) NTA is the Northern Tributary Area, a separate drainage basin located in the northern part of VWD's service area that drains away from the wastewater collection system. NTA flows were estimated and would need further evaluation if this area is to be connected into VWD/s sewer system.

Liquids Treatment Facility

VWD currently has a total of 12.67 MGD liquids treatment capacity between EWPCF and MRF. VWD owns 7.67 MGD of liquids treatment capacity at the EWPCF. MRF has a liquid treatment capacity of 5.0 MGD, with a peak wet weather capacity of 8.0 MGD. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 1.73 MGD (VWD 2023.)

Ocean Disposal Capacity

EWPCF's ocean outfall consists of approximately 1,000 feet on land and extends approximately 7,900 feet into the Pacific Ocean. The EWPCF employs peak flow management procedures and has constructed facilities to manage peak flows, including storage tanks and pump stations. Per the 2018 Master Plan, the plant has provisions to incrementally increase capacity by adding two more 8 MG basins in the future, for a maximum storage capacity of 24 MG. The member agencies' ability to manage inflow and infiltration into the sewer system is a major factor in deferring additional peak flow facilities or future outfall upgrades at the EWPCF (VWD 2018).

VWD currently owns 10.47 MGD of ocean disposal capacity at the EWPCF. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 3.93 MGD (VWD 2023).

Land Outfall Capacity

A majority of VWD's wastewater is conveyed to the EWPCF using VWD's maintained Land Outfall. The Land Outfall is approximately 8 miles long and conveys flow by gravity as well as pressure through siphon sections. VWD maintains the entire pipeline from Lift Station No. 1 to the EWPCF. From Lift Station No. 1 to El Camino Real, VWD is the sole user of this pipeline. Total capacity of the land outfall is 20.85 and the land outfall capacity controlled by VWD is 12.10 MGD (VWD 2023).

As stated above, the MRF has a capacity of 5.0 MGD with a peak wet weather capacity of 8.0 MGD. Combined with the 12.10 MGD capacity of the land outfall controlled by VWD, VWD has a combined peak wet weather wastewater collection capacity of 20.10 MGD (12.10 MGD + 8.0 MGD). According to the VWD's 2018 Master Plan, average daily wastewater flow through the land outfall was approximately 7.5 MGD in 2014. This corresponds to a peak wet weather flow of 17.5 MGD, which falls within VWD's combined peak wet weather collection capacity. However, the 2018 Master Plan estimated that, under approved land uses, VWD has an ultimate build-out average flow of 14.4 MGD. This corresponds to a peak wet weather flow of 31.7 MGD, which exceeds VWD's combined peak wet weather collection capacity. To accommodate additional wastewater flows from planned development,

the 2018 Master Plan recommended conveyance of peak flows to the EWPCF through a parallel land outfall (VWD 2023).

VWD Planned System-wide Wastewater Facility Improvements

VWD's 2018 Master Plan analyzed the existing wastewater system to determine size of pipeline replacements and extensions utilizing a hydraulic model developed by collecting the system's physical data, estimating existing wastewater flows, and calibrating the model using actual meter data. The 2018 Master Plan does not include developments that were not approved prior to June 30, 2014. As development projects are proposed, the project proponents will be required to prepare a study that will, at a minimum, define the location and size of the sewer facilities required to serve the development, including the necessary regional collection, transfer, and treatment infrastructure (VWD 2018).

VWD's 2018 Master Plan has identified sewer pipe segments CA-4 through CA-14 for upsizing from 8-inch to 10-inch to 12-inch and 15-inch as Capital Improvement Project (CIP) #SP-23, a phase 5 project. Phase 5 projects are planned for construction after the year 2036 and are completely funded by development without contribution from VWD's capacity fund (VWD 2023).

Based upon the Draft Water and Sewer Study, the following sewer infrastructure improvements may be required to be implemented by the project applicant to address those deficiencies unless subsequent modeling indicates they are not required:

- CIP SP-23: Pacific Street & Descanso Avenue Pipeline Replacement
    - Approximately 1,860 feet of existing 8-inch and 10-inch sewer main within Pacific Street and Descanso Avenue must be replaced with 12-inch main (CA-4 through CA-8).
    - Approximately 1,094 feet of existing 8-inch and 10-inch sewer main within Descanso Avenue and Las Posas Road must be replaced with 15-inch main (CA-9 through CA-14).

Solid Waste

Solid waste disposal in the City is provided by a private franchise hauler, EDCO Waste and Recycling (EDCO), a private waste collection and recycling company which handles all residential, commercial, and industrial collections within the city. Waste collected by EDCO is hauled to the Escondido Transfer Station where it is then transported to the Sycamore Sanitary Landfill in Santee. Recyclable materials are processed at the Escondido Resource Recovery Transfer Station. The project site would be serviced by EDCO. The Escondido Transfer Station has a permitted daily tonnage of 3,223 tons per day (CalRecycle 2019a). Solid waste is consolidated here and then trucked to a landfill for disposal.

The County of San Diego prepared a Five-Year Review Report of its Integrated Waste Management Plan (June 2022) to plan for the next 15 years of countywide landfill disposal capacity and to determine the adequacy of the region's planning documents based on updated demographic trends and regulations. The report used an average of the past 15 years in-county disposal data (2005-2020) to project disposal for the next 15 years (2022-2037). Though in-county disposal may both increase and decrease over the next 15 years, a conservative projection is that disposal will remain near the average. The 15-year disposal average is 3,206,009 in-county tons annually (County of San Diego 2022).

The report included a second disposal projection scenario, which anticipates organic materials being diverted from the landfills at a greater rate to align with the statewide organics legislation and goals

(AB 32, AB 1826, AB 1594, and SB 1383). When the 75% organics diversion rate was applied to the County's baseline disposal, organics waste disposal projections were reduced to 288,541 tons for the year 2025. These reductions were deducted from the overall disposal projection to provide a disposal scenario if organics regulations result in increased diversion. Considering the additional organics diversion scenario, the projected disposal by 2037 would be 2,282,678 tons annually, nearly a million tons (923,330 tons) less than the average disposal projection of 3,206,009 tons (County of San Diego 2022).

The second component of determining disposal capacity is the permitted daily capacities allowed by the Local Enforcement Agencies including any projected maximum disposal limits. The maximum annual allowable permitted capacity for all San Diego County landfills was 6,967,600 tons in 2021 and will be 4,134,600 tons in 2032. Landfill operators project that Otay Landfill will close in 2030 and Miramar Landfill will close in 2031. Sycamore Landfill is anticipated to receive additional waste flows at that time. The County's report projections assumed that Sycamore Landfill will apply for three expansions to their daily permitted capacity. Sycamore Landfill has completed CEQA for these landfill expansions; however, there has been no application to the Local Enforcement Agency to revise the Solid Waste Facility Permit. For the purposes of projection, the County assumed that the first expansion at Sycamore Landfill is estimated to occur in 2025 and daily permitted capacity is projected to increase permitted capacity from its current 5,000 tons per day to 7,000 tons per day. The second expansion is estimated to occur in 2027 and permitted capacity is projected to increase to 9,000 tons per day followed by a third expansion estimated to occur in 2030 to increase permitted capacity to 11,000 tons per day. The County's report indicated that there would be adequate landfill capacity to serve the County for the next 15 years. Specifically at Sycamore Landfill, the report estimated that there was 105,064,991 cubic yards (or 86,153,293 tons) remaining based on aerial survey/calculations occurring in February 2021. Estimated closure date is listed as 2042, though the permit is anticipated to be revised and extended to 2054 (County of San Diego 2022).

Electricity and Natural Gas

SDG&E provides energy service to an estimated 3.3 million consumers through 1.3 million electric meters and approximately 800,000 natural gas meters in San Diego County and southern Orange County (City of San Marcos 2012a). Electrical facilities throughout the city include a combination of aboveground and belowground electrical distribution lines and utilities structures. The city's fiber-optic network is facilitated by a 72-strand fiber-optic line that runs in various streets throughout the city. All major arterials in the city have implemented fiber optics. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing electricity and natural gas infrastructure within Capalina Road or W. Mission Road. This work would take place within existing right-or-way and would not disturb any vegetation. The project would also relocate an SDG&E transformer located on Capalina Road.

Telecommunications

Telecommunications services to the project site may be provided by various distributors. Existing AT&T, Cox and other independent cable companies telecommunication lines are available in the project vicinity.

3.17.2 Regulatory Setting

Existing federal, state, and local regulations related to water, wastewater, and solid waste that are applicable to the proposed project are summarized below.

Federal

Clean Water Act

The federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The City of San Marcos is required to monitor water quality and conform to regulatory requirements of the CWA.

Resource Recovery and Conservation Act

The Resource Recovery and Conservation Act Subtitle D focuses on state and local governments as the primary planning, regulating, and implementing entities for the management of non-hazardous solid waste, such as household solid waste and nonhazardous industrial solid waste. Subtitle D provides regulations for the generation, transportation, and treatment, storage, or disposal of hazardous wastes.

State

California Green Building Standards Code (CCR, Title 24, Part 11 – CALGreen)

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations) is commonly referred to as CALGreen and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2022 building standards code became effective on January 1, 2023. The mandatory standards require the following measures that relate to utilities and service systems (24 CCR Part 11):

- Mandatory reduction in indoor water usage through compliance with specified flow rates for plumbing fixtures and fittings and faucets and fountains.
- Mandatory reduction in outdoor water usage through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance.
- 65% of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

Urban Water Management Plans

Urban water purveyors are required to prepare and update a UWMP every 5 years. The UWMPs address water supply, treatment, reclamation, and water conservation, and contain a water shortage contingency plan. Local UWMPs and those of other water districts are supplemental to the regional plans prepared by MWD. The Water Conservation Bill of 2009 (SBX7-7) requires each urban retail water supplier to develop an urban water use target and an interim urban water use target. Notably, SBX7-7 authorizes urban retail water suppliers to determine and report progress toward achieving these targets on an individual agency basis or pursuant to a regional alliance as provided in California Water Code (CWC) Section 10608.28(a). In accordance with this regulation, the MWD prepared and their Board of Directors adopted its 2020 UWMP in 2021. MWD's UWMP includes estimated future water demands until 2045, using updated population projections and a conservative assumption that, in the absence of mandatory water conservation measures, per-capita consumption could rebound to its 2020 target value (MWD 2021). Demands provided in MWD's UWMP have been coordinated with SDWCA, VWD's wholesale supplier.

Assembly Bill 939 and 341

In 1989, Assembly Bill (AB) 939, known as the Integrated Waste Management Act (California Public Resources Code, Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020.

Senate Bill 1374

Signed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) were codified in Public Resources Code Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also required that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills. The model ordinance was adopted by CalRecycle on March 16, 2004.

Assembly Bill 1826

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses. Additionally, each jurisdiction is to identify a multitude of information, including barriers to siting organic waste recycling facilities, as well as closed or abandoned sites that might be available for new organic waste recycling facilities. AB 1826 defines "organic waste" as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It also defines a "business" as a commercial or public entity, including, but not limited to, a firm, partnership,

proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multi-family residential dwelling consisting of five or more units. As of January 1, 2017, businesses that generate 4 cubic yards or more of organic waste per week are subject to this requirement. Commencing January 1, 2019, businesses that generate 4 cubic yards or more of commercial solid waste per week also are required to arrange for organic waste recycling services. In September 2020, CalRecycle reduced this threshold to 2 cubic yards of solid waste (i.e., total of trash, recycling, and organics) per week generated by covered businesses (CalRecycle 2023).

Senate Bill 1383

SB 1383 establishes statewide organic waste diversion rate goal of 75 percent by 2025. Beginning in 2022, SB 1383 required every jurisdiction to provide organic waste collection services to all residents and businesses, including food, green material, landscaping waste, organic textiles, lumber, paper products, manure, biosolids, digestate, and sludges. Jurisdictions are also required to educate residents and businesses about the collection requirements.

Local

San Diego County Integrated Waste Management Plan

Pursuant to the Integrated Waste Management Plan, the Countywide Integrated Waste Management Plan for San Diego County describes the goals, policies, and objectives of the county for coordinating efforts to divert, market, and dispose of solid waste during the planning period through the year 2017 (County of San Diego 2005). A Five-Year Review Report was prepared in June 2022 to plan for 15 years of countywide landfill disposal capacity and to determine the adequacy of the region's planning documents based on updated demographic trends and regulations. The report identified reduced landfill disposal rates compared to the high in 2005. The plan presumes waste disposal tonnages will not reach the 2005 level again due to increased State and local recycling programs. Another reason for reduced landfill disposal rates is increased conservation and recycling activities, expansion of compost and construction and demolition facilities, and implementation of mandatory recycling ordinances by jurisdictions. Average disposal quantities and landfill capacities are discussed above in Section 3.17.1 (County of San Diego 2022).

Countywide policies for reducing waste and implementing the programs identified in the individual jurisdiction Source Reduction and Recycling Elements and Household Hazardous Waste Elements, which are intended to reduce costs, streamline administration of programs, and encourage a coordinated and planned approach to integrated waste management.

To avoid duplication of effort, all jurisdictions in the county participate in the San Diego County Integrated Waste Management Local Task Force. The Local Task Force coordinates mandated planning, oversees implementation of new or countywide integrated waste management programs, and carries out an active legislative program. Regulatory reform, changes to state diversion requirements, and reduction of the costs of compliance are considered by the Local Task Force, as well as other solid waste issues of regional or countywide concern.

City of San Marcos Municipal Code

Title 8, Health and Sanitation

San Marcos Municipal Code Title 8 contains regulations and provisions on sewers and sewage disposal plants, sewer connections, septic tanks, waste matter, garbage and refuse collection, and other

matters concerning sanitation. Chapter 14.15 contains regulations concerning storm water management and discharge control. Chapter 14.24 contains regulations concerning underground utility facilities. Title 19 regulates subdivision requirements, including the installation of utility facilities and connections and payment or fees for such installations.

Title 20, Chapter 20.330 Water Efficient Landscaping Ordinance (WELO)

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. Title 20, Section 20.330, details the City's Water Efficient Landscape (WELO). In accordance with State law, Chapter 20.330 establishes specific standards for landscape and irrigation design and installation to ensure beneficial, efficient, and responsible use of water resources within the city.

City of San Marcos General Plan

The General Plan Conservation and Open Space Element includes two goals and one policy that are applicable to the proposed project (related to water supply and solid waste):

- Goal COS-5: Reduce water consumption and ensure reliable water supply through water efficiency, conservation, capture, and reuse.
- Goal COS-10: Establish and maintain an innovative, sustainable solid waste collection, recycling, and disposal delivery system for present and future generations.
    - Policy COS-10.1: Promote the curbside recycling program to divert residential refuse from the landfills.

The General Plan Land Use and Community Design Element identifies the following goals and policies regarding utilities and services systems that are applicable to the proposed project:

- Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.
    - Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.
    - Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.
- Goal LU-13: Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis, to ensure an adequate water supply for existing and future residents.
    - Policy LU-13.1: Work closely with local and regional water providers to ensure high quality water supplies are available for the community.
    - Policy LU-13.2: Actively promote water conservation programs aimed at reducing demand.
    - Policy LU-13.3: Encourage exploration and use of deep underground wells to reduce reliance on treatable water.
- Goal LU-14: Wastewater: Ensure an adequate wastewater system for existing and future development.

  - Policy LU-14.1: Work closely with local service providers to ensure an adequate wastewater system for existing and future development is in place.
  - Policy LU-14.2: Ensure development approval is directly tied to commitments for the construction or improvement of primary water, wastewater, and circulation systems.

- Goal LU-16: Solid waste: reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program.
  - Policy LU-16.1: Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services.
  - Policy LU-16.2: Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.
- Goal LU-17: Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective, and efficient service for San Marcos.
  - Policy LU-17.2: Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.
  - Policy LU-17.3: The City shall prohibit above ground utility equipment within any of the pedestrian pathway and street frontage areas. All above ground utilities shall be placed either within; "wet closets" within the buildings, underground vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in advance to coordinate utilities prior to approval of the final street improvement plans for both public and private street frontages and prior to submittal of building permits.
  - Policy LU-17.4: Require utility location to be shown on all site development plans at the time of development/ project application.

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.10-7 in Section 3.10, the project is consistent with the applicable goals and policies.

3.17.3 Thresholds of Significance

The determination of significance for utilities and service systems is based on Appendix G of the CEQA Guidelines. Utilities and services system impacts would be significant if the proposed project meets any of the following thresholds.

- Threshold #1: Require or result in the relocation of reconstruction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Threshold #2 - Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- Threshold #3 - Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

- Threshold #4 – Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- Threshold #5 – Comply with federal, state, and local management and reduction statues and regulations related to solid waste?

3.17.4 Project Impact Analysis

The project proposes to connect to the existing 8-inch water main and 8-inch sewer main in Capalina Road. The project would also construct an 8-inch water main (530 linear feet) through the project site to create a looped water main connecting Capalina Road and W. Mission Road to meet fire flow requirements. The project would dedicate an easement to VWD through the project's drive aisle.

Two scenarios are considered for the off-site sewer improvements needed to serve the project, Scenario 1 and Scenario 2. The following offsite improvements would be required, depending on the scenario that is implemented, and would be required to be in place prior to project occupancy. These improvements would occur within already paved roadways.

Scenario 1

- Upsize approximately 1,860 feet of existing 8-inch and 10-inch sewer main within Pacific Street and Descanso Avenue with a 12-inch main (CA-4 through CA-8); and
- Upsize approximately 1,094 feet of existing 10-inch sewer main within Descanco Avenue and Las Posas Road with a 15-inch main (CA-9 through CA-14).

Scenario 2

Scenario 2 would re-route existing sewer flows from Seminole Street south to Grand Avenue, rather than north to pipes CA-7 through CA-14, located in Descanco Avenue and Las Posas Road, which were determined to have deficient capacity in Scenario 1.

Scenario 2 relies on pending VWD-Board approved improvements associated with the South Pacific Industrial project which would construct of a sewer main extension in Pacific Street between Seminole Street and Grand Avenue (pipes ALT-2 and ALT-3).

Under Scenario 2, the proposed project would

- Construct a pipe (ALT-1) to connect the existing sewer main in Seminole Street to the new main in South Pacific Street (ALT-2 and ALT-3); and
- Sever the connection to the existing sewer main in the northern portion of Pacific Street.

Given the current deficiencies in sewer segments CA-4 through CA-14, the proposed project may also need to implement the following improvements under Scenario 2, unless VWD determines they are no longer needed based upon future modeling and coordination with the project applicant.

- Upsize approximately 1,860 feet of existing 8-inch and 10-inch sewer main within Pacific Street and Descanso Avenue with a 12-inch main (CA-4 through CA-8); and
- Upsize approximately 1,094 feet of existing 10-inch sewer main within Descanco Avenue and Las Posas Road with a 15-inch main (CA-9 through CA-14).

The EIR assumes these improvements may still be required under Scenario 2 to provide the most conservative analysis

Additionally, the project applicant shall pay the applicable Water and Wastewater Capital Facility Fees in affect at the time service is committed in accordance with VWD rules and regulations. Proof of payment shall be provided to the City's Planning Manager.

The design for the dry utility connection is still under preparation, however the project proposes to connect to existing infrastructure within Capalina Road or W. Mission Road. This work would take place within existing right-or-way and would not disturb any vegetation. The project would also relocate an SDG&E transformer located on Capalina Road.

Threshold #1: Require or result in the relocation of reconstruction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water

The project site lies within VWD's water service area and would be served by VWD for potable water and water for fire protection. VWD has confirmed their ability to serve the project and has prepared a Technical Memorandum which includes a Water System Analysis. The memorandum analyzes water demand, water distribution, water storage capacity and water pump station capacity (VWD 2023, Appendix Q.1).

Water Demand

The City of San Marcos' approved land use designation for the project site is MU-3, Mixed (Commercial & Office – no residential). VWD's 2018 Master Plan based its ultimate water demand planning on this land use. The project is proposing 119 multi-family residential units with 4,000 square feet (s.f.) of commercial use. **Table 3.17-4** provides the average water demand generated both under the density planned for the VWD 2018 Master Plan and for the proposed project. As shown, the proposed project would increase the projected average water demand from the 2018 Master Plan land use by 18,885 gallons per day (GPD) (VWD 2023).

Table 3.17-4 Estimated Water Demands for Proposed Project

Land Use Type	Area (Acres)	Residential Units	Duty Factor (gpd/ac)	Water Demand (gpd)
2018 Master Plan Land Use Demand				
Commercial/Office	2.51	0	1,500	3,765
Total	**2.51**			**3,765**
Proposed Project Demand				
Residential (40-50 du/ac)	2.51	119	9,000	22,590
Commercial/Mixed Use	0.04		1,500	60
Total	**2.51**			**22,650**

Land Use Type	Area (Acres)	Residential Units	Duty Factor (gpd/ac)	Water Demand (gpd)
Water Demand Increase				18,885

Source: VWD 2023.
Notes: GPD= Gallons per Day
MGD= Million Gallons per Day
MG= Million Gallons

Water Distribution System Analysis

VWD prepared a water distribution system analysis to identify potential system impacts that may be created by the proposed water demand, and to recommend any improvements required to provide service to the project. Modeling focused on the infrastructure in the direct vicinity of the project site. Per the 2018 Master Plan, maximum day demands for the proposed project are 300% those of average day demands, and peak hour demands are 620% those of average day demands (VWD 2023).

Pipeline design criteria states that to avoid excessive velocity and headloss within the distribution system, the maximum allowable velocity is 7 feet per second. The model found that the project would not create any distribution system deficiencies under an average day demand scenario but would create system deficiencies under maximum day plus fire flow demand conditions in the existing 8-inch water main in Capalina Road. As discussed above, the project design includes upsizing approximately 876 feet of the existing 8-inch water main in Capalina Road (CA-1) with a 10-inch main to meet fire flow requirements. As shown in **Table 3.17-5**, an upsized pipe diameter of ten inches would reduce the velocity to 6.72 feet per second. Improvements would occur within an existing paved road so no additional environmental impacts would occur. Less than significant impacts are identified for the water distribution system.

Table 3.17-5 Potable Water Pipeline Results under Maximum Day Demand plus Fire Flow Conditions

Pipe ID Number	Length (ft)	Existing Pipe Diameter (in)	Velocity under Average Day Demand (ft/s) (1)	Velocity under Maximum Day + Fire Flow (ft/s) (1)	Upsized Pipe Diameter (in)	Velocity under Maximum Day + Fire Flow w/ Upsized Pipe (ft/s) (1)
C-1	876	8	0.08	10.50	10	6.72

Source: VWD 2023.
Notes: (1) Maximum allowable velocity: 7 feet per second.
FT= feet
IN= inches
FT/S= feet per second

Water Storage Analysis

The 2018 Master Plan outlines VWD's potable water storage reservoirs for each pressure zone. The project is located entirely within the VWD 855 pressure zone. Water storage for this zone is located within the 920 zone and 1028 Twin Oaks pressure zones. **Table 3.17-6** shows the required storage in the 855, 920, and 1028 Twin Oaks pressure zones for existing and ultimate build-out conditions relative to the existing storage provided within each zone. As shown in Table 3.17-6, there is sufficient

existing storage available to meet existing demand. The project would increase the projected average water demand by approximately 18,885 GPD. The amount of additional reservoir storage required is 500% of the project's average day demand, which is 94,425 gallons GPD (18,885 gallons X 500%). VWD's analysis found that water storage capacity is currently available to serve the project's increased storage requirements. The project would contribute to an existing deficiency identified for ultimate storage requirements. However, per VWD, Master Plan projects would address and accommodate the ultimate build-out storage deficiency and Water Capital Facility Fees paid by this project would be used for the increase in storage necessitated by the project's demand (VWD 2023). **Less than significant impacts** are identified for water storage capacity.

Table 3.17-6 Existing Reservoir Storage Capacity and Requirements

Pressure Zone	Existing Average Day Demand (MGD)	Existing Storage Requirement (MG)	Ultimate Average Day Demand (MGD)	Ultimate Storage Requirement (MG)	Existing Storage Available (MG)
855	3.74	50.05	6.79	101.25	0
920	5.61		10.40		18
1028 Twin Oaks	0.66		3.06		73
Totals	10.01	50.05	20.25	101.25	91

Source: VWD 2023.
Notes: MGD= Million Gallons per Day
MG= Million Gallons

Water Pump Station Analysis

Since the proposed project is located in a pressure zone that is not served by pumping, there would be **no impacts** to existing or proposed pump stations (VWD 2023).

Summary

While the project would increase water demand by 18,885 GPD above what the 2018 Water Master Plan identified, VWD's analysis determined that with payment of the required Water Capital Facility Fees, the project would have less than significant impacts related to water distribution, water storage, or water pumping (VWD 2023). The project proposes to connect to the existing 8-inch water main located in Capalina Road and would construct 530 feet of an 8-inch water main through the project site to create a looped water main connecting Capalina Road and W. Mission Road to meet fire flow requirements. The project would dedicate an easement to VWD through the project's drive aisle.. This improvement would occur within an existing paved road and would not result in any additional significant environmental impacts. Impacts to water services would be **less than significant.**

Wastewater

The proposed project lies completely within VWD sewer shed 21C. The analysis of wastewater infrastructure is based upon the Draft Water and Sewer Study, prepared by VWD (VWD 2023). The Draft Water and Sewer Study is included in Appendix Q.1 of this EIR.

As described above, the proposed project would include development of 119 apartments and 4,000 s.f. of commercial use. The current General Plan designation for the project site is MU-3 Mixed Use which allows for commercial and retail uses. VWD's 2018 Master Plan based its ultimate wastewater

generation planning on this approved land use and assumed the project site would generate approximately 3,012 GPD of wastewater. The project is proposing a General Plan Amendment to change the site to MU-2 with proposed residential development (40-50 du/acre) and commercial use. The Draft Water and Sewer Study estimated that the proposed project would generate approximately 20,379 GPD of wastewater. This is an increase in the projected average wastewater generation of 17,367 GPD (VWD 2023).

Wastewater Collection System Analysis Model Results

VWD modeled several wastewater scenarios to identify system impacts that may be created by the proposed sewer generation, and to recommend any improvements required to provide service to the project. Modeling focused not only on the sewer collection infrastructure in the direct vicinity of the project site, but also on all downstream infrastructure from the development to Lift Station No. 1 on San Marcos Boulevard that would be receiving project flows. Two scenarios were modeled.

Scenario 1

Scenario 1 modeled the proposed project connecting to the existing VWD sewer system. The modeling results showed that there are deficiencies in pipe segments CA-4 through CA-14, located in Pacific Street, Descanso Road and Las Posas Road, under the currently approved density under peak wet weather flows during the ultimate buildout condition. The wastewater flows from the proposed project would further increase those deficiencies.

Scenario 2

Scenario 2 would re-route existing sewer flows from Seminole Street south to Grand Avenue, rather than north to pipes CA-7 through CA-14, located in Descanco Avenue and Las Posas Road, which were determined to have deficient capacity in Scenario 1. The South Pacific Industrial project has been approved by the VWD Board for construction of a sewer main extension in Pacific Street between Seminole Street and Grand Avenue (pipes ALT-2 and ALT-3). Under Scenario 2, the proposed project would construct a pipe (ALT-1) to connect the existing sewer main in Seminole Street to the new main in South Pacific Street (ALT-2 and ALT-3) and sever the connection to the existing sewer main in the northern portion of Pacific Street. The diverted flows, as well as the flows from the recently approved Cherokee multi-use project, the South Pacific Industrial project, and the WoodSpring Suites hotel project would be routed through the pipes ALT-1 through ALT-7 to join the flows in Las Posas Road at pipe CA-18. Under this scenario, there would still be deficiencies in segments CA-4 through CA-14 under the currently approved density under peak wet weather flows during ultimate build-out conditions and the wastewater flow from the proposed project would increase those deficiencies. However, the deficiencies in the pipelines located in Descanso Avenue and Las Posas Road (CA-7 through CA-14) would be reduced and no new deficiencies would occur in Pacific Street, Grand Avenue or Las Posas Road. The project applicant would proceed with Scenario 2.

The VWD 2018 Master Plan identified pipe segments CA-4 through CA-14 as CIP SP-23 (Pacific Street & Descanso Avenue Replacement Project). This Capital Improvement Project (CIP) will upsize the existing 8-inch and 10-inch pipes to 12-inch and 15-inch pipes. This is a Phase 5 project in the CIP and is planned for construction after the year 2036. As discussed above, if required, the project includes upsizing approximately 1,860 feet of existing 8-inch and 10-inch sewer main within Pacific Street and Descanso Avenue with a 12-inch main (CA-4 through CA-8); and upsizing approximately 1,094 feet of existing 10-inch sewer main within Descanso Avenue and Las Posas Road with a 15-inch main (CA-9 through CA-14) (VWD 2023). Improvements to these sewer lines would address

deficiencies and would occur within existing paved roads, so no additional environmental impacts would occur. Less than significant impacts are identified for the wastewater collection system.

Wastewater Lift Station Analysis

Since the project is not located in a sewer shed that is served by a lift station, no lift station upgrades would be required, and no impacts would occur (VWD 2023).

Parallel Land Outfall Analysis.

Per the Draft Water and Sewer Study, prepared for the project, VWD has a combined peak wet weather wastewater collection capacity of 20.85 MGD. VWD's 2014 average daily wastewater flow through the land outfall was 7.5 MGD. This corresponds to a peak wet weather flow of 17.5 MGD, which falls within VWD's combined peak wet weather collection capacity.

The 2018 Master Plan estimated that, under approved land uses, VWD has an ultimate build-out average dry weather flow of 14.4 MGD. This corresponds to a peak wet weather flow of 31.7 MGD, which exceeds VWD's combined peak wet weather collection capacity. To accommodate additional wastewater flows from planned development, the 2018 Water Plan recommended conveyance of peak flows to the EWPCF through a parallel land outfall (VWD 2023).

The project proposes to generate 17,367 GPD of additional average wastewater flow that was not accounted for in the Land Outfall's capacity studied in the 2018 Master Plan. However, per the Draft Water and Sewer Study, prepared for the proposed project, VWD finds that outfall capacity is currently available to serve the project's proposed wastewater generation. Wastewater Capital Facility Fees paid by the project would be used toward design and construction of a parallel land outfall to be sized to accommodate ultimate build-out wastewater flows (VWD 2023). Less than significant impacts are identified for the parallel land outfall.

Wastewater Treatment Facility Analysis

Because VWD utilizes both MRF and EWPCF for wastewater treatment, wastewater generated by the proposed project would be treated at either facility. MRF has liquids treatment capacity of up to 5 MGD with a peak wet weather capacity of 8 MGD. MRF does not have solids treatment capacity, and therefore all solids are treated at the EWPCF. The EWPCF is a regional facility with treatment capacity of up to 40.51 MGD (VWD 2023).

Solids Treatment Capacity

VWD currently owns 10.47 MGD of solids treatment capacity at EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concluded that adequate solids treatment capacity exists at this time to serve the project. However, the ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected solids treatment capacity deficiency of 3.93 MGD. Wastewater flows from the proposed project would contribute to that deficiency. Wastewater Capital Facility Fees paid by the project would be used towards the deficiency to accommodate the solid treatment capacity wastewater flows (VWD 2023). Therefore, less than significant impacts would occur.

Liquid Treatment Capacity

VWD currently owns 7.67 MGD of liquids treatment capacity at the EWPCF in addition to the liquids treatment capacity of 5.0 MGD at MRF, for a total of 12.67 MGD of liquids treatment capacity. VWD's

2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concludes that adequate solids treatment capacity exists at this time to serve the project. However, the ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 1.73 MGD. Wastewater flows from the proposed project would contribute to that deficiency. Wastewater Capital Facility Fees paid by the project would be used towards the deficiency to accommodate the ultimate average wastewater flow (VWD 2023). Therefore, less than significant impacts would occur.

Ocean Disposal Capacity

VWD currently owns 10.47 MGD of ocean disposal capacity at the EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concludes that adequate ocean disposal capacity exists at this time to serve the project. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD resulting in an ocean disposal deficiency of 3.93 MGD. Wastewater flows from the proposed project would contribute to that deficiency. Wastewater Capital Facility Fees paid by the project would be used towards the deficiency to accommodate the ocean disposal wastewater flow (VWD 2023). Therefore, less than significant impacts would occur.

Wastewater Summary

While the project would increase wastewater flows by 17,367 GPD above what the 2018 Water Master Plan identified, VWD has determined that adequate wastewater treatment and disposal capacity exists for the proposed project at this time. As discussed in the Draft Water and Sewer Study (Appendix Q.1), the project applicant would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with District rules and regulations.

The project proposes to connect to the existing 8-inch sewer main located in Capalina Road and would construct an 8-inch water main through the project site to create a looped water main connecting Capalina Road and W. Mission Road. Additionally, as part of the project design, the applicant would implement Scenario 2 for wastewater service, as detailed in the VWD Capalina Apartments Water and Sewer Study (2023). These improvements would occur within the project site or within existing paved roads and would not result in additional environmental impacts. Under these conditions, the project would not exceed current capacities of the wastewater treatment system and would not significantly impact existing wastewater treatment systems. Therefore, impacts to sewer services would be **less than significant**.

Stormwater Drainage

As discussed in Section 3.9.4, Hydrology and Water Quality, the proposed project would result in an increase of impervious areas on the site. If not carefully planned for, increased runoff from impervious surface can cause alterations to drainage courses. However, the proposed project has been designed to carefully handle runoff and to meet regulatory requirements to ensure that post-development runoff quantities and rates are similar to or less than the pre-development condition. Although the project would include new storm water infrastructure (two biofiltration basins) to support project facilities, the proposed infrastructure has been accounted for and analyzed throughout this EIR. The project would not contribute a substantial amount of new stormwater runoff relative to existing conditions, and impacts are determined to be less than significant. Please refer to Section 3.9, Hydrology and Water Quality, for additional discussion related to drainage.

Electric Power/ Natural Gas

The project would be served by SDG&E for electricity and gas service. The project would be required to implement, as applicable, the City's Climate Action Plan Consistency Checklist measures that would reduce operational electricity consumption. The project would be required to include various on-site features and measures to reduce the project's energy consumption, which includes electric vehicle charging stations and electric vehicle ready spaces, electric or solar water heaters, solar panels, a transportation demand management plan, reduced landscaping water use, and trees. The project would also be built under the most current Title 24 standards which are designed to reduce energy.

The design for the dry utilities' connection is still under preparation; however, the project proposes to connect to existing electricity and gas infrastructure within Capalina Road or W. Mission Road. This work would take place within existing right-or-way and would not disturb any vegetation. The project would also relocate an SDG&E transformer located on Capalina Road. Aside from these improvements, the project would not require the relocation of reconstruction of new or expanded power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be **less than significant.**

Telecommunications

Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. Existing telecommunications infrastructure in the vicinity of the project site would be available to serve the proposed project. No specific systems upgrades are proposed or would be required to serve the proposed project. Thus, the project would not result in physical impacts associated with the construction of telecommunications systems. Impacts would be **less than significant.**

Threshold #2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

As discussed in response to Threshold #1, the project would be served by VWD. Per the Water and Sewer Memorandum (Appendix Q.1), the project is anticipated to generate an additional 18,885 GPD over the ultimate demand projected in the 2018 Master Plan. This equates to approximately 21.15 acre-feet per year.

As discussed above, MWD's UWMP shows water supplies would be available to meet current and future demands of the region. With a projected annual water demand of 5,374,000 acre-feet per year in 2045, the MWD UWMP demonstrates that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2045 under normal, single dry, and multiple dry water years (MWD 2021). Additionally, SDCWA's UWMP assessed water reliability from 2025 through 2045 and determined that there are sufficient supplies to meet projected demands under Single Dry-Year and Multiple Dry-Year conditions (SDCWA 2021). The additional 21.15 acre-feet per year generated by the project would present a less than significant increase in water demand relative to the annual water demand projected by the MWD's UWMP.

Further, the project site would be developed in compliance with CALGreen, which implements water efficiency standards for appliances and fixtures. Compliance with CALGreen would further reduce project water usage in combination with VWD and MWD's ongoing water conservation practices. Compliance with these regulations and conservation measures would ensure sufficient water supplies are available to service the project. Impacts to water services would be **less than significant.**

Threshold #3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed under Threshold #1, above, the project site is within VWD's service area, which would provide service to the project. The project is expected to increase wastewater flows by 17,367 GPD over what was assumed in the 2018 Master Plan. This would lead to an increase of 17,367 GPD in solids handling, liquids handling and ocean disposal capacity requirements at the EWPCF and in the parallel land outfall's capacity requirement. VWD has determined that adequate wastewater treatment and disposal capacity exists for the proposed project at this time. As discussed in the Draft Water and Sewer Study (Appendix Q.1), the project applicant would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with District rules and regulations. Under these conditions, VWD has determined that adequate wastewater treatment and disposal capacity exists for the proposed project at this time (VWD 2023). Because the project would not exceed current capacities of the wastewater treatment system and would contribute Wastewater Capital Facility fees that would be used towards improvements, impacts would be **less than significant.**

Threshold #4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction of the proposed project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, and plastics. The City works with EDCO to promote its construction and demolition material waste removal and recycling program. A minimum of 75% of non-hazardous construction and demolition waste would be recycled pursuant to the requirements of CalGreen and AB 939, and construction would not impair the attainment of solid waste reduction goals. Construction impacts would be less than significant.

Operation of the proposed project would result in increased generation of solid waste. The anticipated solid waste generation from the proposed project was estimated using CalRecycle's Estimated Solid Waste Generation Rates (CalRecycle 2019b). It is estimated that the residential portion of the project (119 units) would generate approximately 1,455 pounds of solid waste per day (12.23 pounds per household). The 4,000 s.f. of commercial portion of the project is estimated to generate 184 pounds per day (0.046 pounds per s.f.), for a total of 1,639 pounds or 0.74 tons per day. This does not consider any waste diversion through recycling. According to CalRecycle, the city has a disposal rate target of 8.9 pounds per person per day. If the City meets this target, the city is considered in compliance with the 50% diversion requirement of AB 939. The most recent data (2021) from CalRecycle identifies the annual per capita disposal rate as 5.6 pounds per person per day (CalRecycle 2021). Thus, the city is exceeding their target for diversion.

Solid waste generated by the proposed project would be collected and transported to the Sycamore Sanitary Landfill by EDCO. According to CalRecycle, the facility currently has a daily permitted capacity of 5,000 tons per day for solid waste but is projected to increase to 7,000 tons per day in 2025 and 9,000 tons per day in 2027. Sycamore landfill's estimated closure date is listed as 2042, though the permit is anticipated to be revised and extended to 2054 (County of San Diego 2022). Solid waste generated by the proposed project would contribute a minimal amount of solid waste to Sycamore Sanitary Landfill's daily permitted capacity. As such, the proposed project's solid waste generation can be accommodated at the landfill. The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts would be **less than significant.**

Threshold #5: Comply with federal, state, and local management and reduction statues and regulations related to solid waste?

The proposed project would comply with all federal, state, and local statues and regulations regarding solid waste. The project would include trash enclosures with clearly marked, source-sorted receptacles for disposing of solid waste, recyclables, and organic waste to facilitate compliance with the requirements of AB 341, AB 939, AB 1826, SB 1383, and CALGreen Code. Additionally, all solid waste facilities, including landfills, require solid waste facility permits to operate. In San Diego County, Public Resources Code (Sections 44001- 44018) and California Code of Regulations Title 27, Division 2, Subdivision 1, Chapter 4 (Section 21440 et seq.) authorizes the County Department of Environmental Health, Local Enforcement Agency to issue solid waste facility permits. Sycamore Sanitary Landfill is a permitted facility and EDCO is a licensed hauler. As such, the project would comply with existing regulations related to solid waste disposal and would not violate federal, state, or local management and reduction statutes and regulations related to solid waste. Impacts would be **less than significant**.

3.17.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to utilities and services systems, the cumulative analysis is based upon a combined list and plan project approach.

Water

Some of the cumulative projects included in Table 2-3 are within VWD's service area for potable water service and would contribute to the cumulative demand for water supply and water infrastructure. However, MWD anticipates the demand of future development through their master planning process. According to MWD's UWMP, no water shortages are anticipated within MWD's service area in single or multiple dry years through 2045. Not all cumulative projects included in Table 2-3 fall into the VWD's service area; those that do not would be served by neighboring districts.

As described in Section 3.17.4, above, the proposed project would result in less than significant impacts to water supply services. As discussed in Section 3.17.1, MWD has determined that with supplies provided by SDCWA and compliance with the Water Conservation Bill of 2009, no water shortages would occur in a normal year through 2045 (MWD 2021). Other cumulative projects that are consistent with the land use assumptions made in MWD's UWMP would have already been accounted for in demand projections. Projects that are inconsistent with the land use assumptions made in MWD's UWMP would also be subject to CEQA and required to include water supply assessments to demonstrate adequate supply for development. Further, related projects would be required to show that adequate infrastructure exists to serve the related projects and mitigate any potential impacts to water infrastructure caused by the project. All projects would be required to pay applicable Capital Facility Fees to VWD or the applicable water service provider, which are required to go towards infrastructure improvements. Thus, cumulative impacts to water services would be **less than significant.**

Wastewater

Cumulative projects that are within the VWD service area for wastewater services would contribute to the cumulative demand for wastewater services. VWD anticipates the demand of future development through their master planning process. Cumulative projects that are consistent with the land use assumptions made in VWD's Master Plan would have already had their demand accounted for.

As discussed in Section 3.17.4, above, VWD has sufficient capacity at this time to account for the proposed project's estimated increase in wastewater generation. However, VWD identified existing system deficiencies in pipe segments CA-4 through CA-14, as well as in capacity for solids handling, liquids handling, ocean disposal and parallel land outfall's capacity for ultimate build-out wastewater flows. The cumulative projects that result in an increase in density or development over what was accounted for in VWD's Master Plan would further exacerbate these deficiencies. Per VWD, payment of Wastewater Capital Facility fees would go toward projects identified in their 2018 Master Plan including upsizing applicable pipelines and design and construction of a parallel land outfall (VWD 2023). The project applicant for the proposed project and for cumulative projects would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with District rules and regulations, which would be utilized to fund the identified projects in the 2018 Master Plan. Thus, with payment of all applicable Wastewater Capital Facility fees to VWD, cumulative impacts to wastewater treatment facilities would be **less than significant.**

Electrical Power and Natural Gas

Potential cumulative impacts related to energy and natural gas infrastructure would result if the project, in combination with past, present, and future projects, would require or result in the relocation of reconstruction of new or expanded electric power or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

As described in Section 3.17.4, above, the proposed project would have a less than significant impact related to energy and natural gas. Each of the cumulative projects identified in Table 2-3 would be within the service area of SDG&E. Each of the cumulative projects would be required to analyze their potential for impacts related to the provision of electricity and natural gas services, including the need for new or expanded utility infrastructure, and would be required to mitigated potential impacts from expanded infrastructure to below a level of significance. Cumulative projects are also required to comply with the state's energy efficiency standards and local regulations. Additionally, SDG&E regularly undertakes upgrades and expansions, as needed, throughout their service area to continue provided reliable electricity and natural service. SDG&E conducts their own CEQA review on these projects. In conclusion, cumulative impacts related to the provision of electrical power and natural gas would be **less than significant.**

Solid Waste

Future development projects would generate solid waste to be disposed of at the Sycamore Sanitary Landfill. According to CalRecycle, the facility has a daily permitted capacity of 5,000 tons/day for solid waste (expected to increase to 7,000 tons per day in 2025, and 9,000 tons per day in 2027). As of February 2021, remaining capacity was 105,064,991 cubic yards or approximately 86 million tons with an anticipated closure date of 2042, likely to be revised and extended to 2054 (County of San Diego 2022). Further, there are five other landfills in the County. This includes Borrego Landfill, with a remaining capacity of 88,750 cy and a closure date of 2046; Miramar Landfill, with a remaining capacity of 11,080,871 cy and a closure date of 2031); Otay Landfill, with a remaining capacity of

11,122,997 cy and closure date of 2030, and two US Marine Corps landfills – Las Pulgas and San Onofre, with remaining capacities of 5,657,717 and 1,057,605 cy and 2060 and 2031 closure dates respectively (County of San Diego 2022).

The proposed project and cumulative projects include 2, 373 residential units, approximately 307,000 s.f. of commercial and 122 hotel rooms. When the CalRecycle's Estimated Solid Waste Generation Rates (CalRecycle 2019b) are applied to the proposed project and the cumulative project, the total solid waste anticipated to be generated is 43,388 pounds per day (lbs/day) or 21.69 tons/day. This is prior to any diversion from mandatory recycling and green waste/organics program. Assuming a 75% diversion rate, as required by AB 341, the net solid waste generation would be approximately 5.42 tons/day. The Sycamore Sanitary Landfill has a daily permitted capacity has a daily permitted capacity of 5,000 tons/day, which is expected to increase to 7,000 tons/day in 2025 and 9,000 tons/day in 2027. The cumulative project's would result in incremental contribution to the landfill capacity; however the impact would be AB 341.

3.17.6 Mitigation Measures

Impacts would be less than significant, so no mitigation measures are required.

3.17.7 Conclusion

Development of the proposed project would result in an incremental increase in the need for water, wastewater, stormwater, energy, and solid waste services. However, as outlined in the project impact analysis above, it is determined that water, wastewater, stormwater, energy, and solid waste services would be adequate and **project- and cumulative-level impacts would be less than significant.**

4.0 Alternatives

4.1 Introduction to Alternatives

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines states that an Environmental Impact Report (EIR) shall "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives."

The range of alternatives evaluated in an EIR is governed by the "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative (Section 15126.6(a) of the CEQA Guidelines).

In developing the alternatives to be addressed in the EIR, the potential alternatives were evaluated in terms of their ability to meet the basic objectives of the project, while reducing or avoiding the environmental impacts of the project identified in Section 3.0, Environmental Analysis, of the EIR.

In determining what alternatives should be considered in an EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are important to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, the San Marcos City Council (see Public Resources Code Section 21081[a] [3]).

4.2 Project Objectives

The following project objectives describe the purpose of the proposed project and provide a basis for identification of a range of reasonable alternatives evaluated in the EIR:

- Provide a multi-family housing opportunity through a range of unit types, sizes, and number of different bedroom counts, including studios, one-, two-, and, three-bedroom units, as well as a range of affordability to accommodate a full spectrum of family demographics to contribute to the growing housing needs of the region.
- Integrate high-density housing opportunities and commercial uses close to major transit corridors, education facilities, and job centers to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce energy usage and air pollutant and greenhouse gas (GHG) emissions.
- To the extent possible given the site constraints, maximize the opportunity to provide high-density housing for the City of San Marcos in the 45-50 dwelling unit per acre density range.
- Support the housing needs of the City of San Marcos and the region by developing high-quality, workforce housing that balances density with price-points and long-term maintenance costs, such that new apartments remain financially attainable.
- Incorporate deed restricted affordable housing into a portion of the proposed project.

4.3 Project Alternatives Considered in This EIR

4.3.1 Description of Alternative

The following alternatives are under consideration for this project:

- No Project/No Development Alternative (Section 4.3.3)
- No Project/ Existing Plan Alternative (Section 4.3.4)
- Reduced Intensity Alternative (Section 4.3.5)

Alternatives considered and removed from further consideration are summarized in Section 4.4.

4.3.2 Summary of Impacts

- Project- and cumulative-level impacts associated with implementation of the proposed project are evaluated in Sections 3.1, Aesthetics, through 3.17, Utilities and Service Systems, of the EIR. As identified in Table 1-1, in Chapter 1, Executive Summary, construction and/or operation of the proposed project would have the potential to cause the following significant but mitigable environmental impacts:

- Impact BIO-1: Potential to impact avian species protected under the Migratory Bird Treaty Act if tree removal, vegetation removal, or other construction activities occur during the nesting season.
- Impact CR-1: Due to grading and ground disturbing activities, the project has the potential to impact unidentified archeological resources on the project site.
- Impact CR-2: There is a potential for project construction activities to disturb previously unidentified human remains on the project site.
- Impact GEO-1: Project grading may result in disturbance of previously unknown paleontological resources.

All project impacts would be mitigated to below a level of significance.

4.3.3 No Project/No Development Alternative

Under the No Project/No Development Alternative, the proposed project would not be implemented, and the project site would remain undeveloped and in its current condition. No grading or construction would occur on the project site under this alternative. The project site is currently undeveloped and supports disturbed habitat.

4.3.3.1 Comparison of the Effects of the No Project/No Development Alternative to the Proposed Project

Aesthetics

Under this alternative the project site would remain in its current condition and the visual character of the site would not change. The site is generally flat, with elevations ranging from 580-600 feet above mean sea level. The project site is currently undeveloped, vacant land and the entire site is characterized as disturbed habitat (Dudek 2023a). There are a few ornamental trees on the project

site. This alternative would not add additional sources of lighting to the project site and vicinity. Compared to the proposed project, this alternative would reduce impacts. No aesthetics impacts would occur under the No Project/No Development Alternative.

Air Quality

Under the No Project/No Development Alternative, air emissions associated with project construction including emissions associated with grading, site preparation, site finishing and building finishing would not occur. Implementation of this alternative would not introduce any uses that could generate operational air emissions. This alternative would not result in any construction or operational air pollutant emissions. However, as discussed in Section 3.2.4, impacts to air quality for the proposed project would be less than significant and no mitigation would be required. Compared to the proposed project, this alternative would reduce air pollutant emissions. No air quality impacts would occur under the No Project/No Development Alternative.

Biological Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. This alternative would avoid potential impacts to nesting birds (Impact BIO-1) since no trees or vegetation would be removed. The proposed project includes a mitigation measure to reduce the potential impact to nesting birds to below a level of significance. Since impacts to biological resources would be avoided under the No Project/No Development Alternative, mitigation measure MM-BIO-1 would not be implemented or required. Compared to the proposed project, this alternative would eliminate the potential biological resources impacts. No biological resources impacts would occur under the No Project/No Development Alternative.

Cultural Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. Therefore, there would be no potential to impact unknown archaeological resources potentially located within the project site (Impact CR-1). Further, there would be no potential to disturb previously unidentified human remains that may be present on the project site (Impact CR-2). As such, mitigation measures MM-CR-1 through MM-CR-4 would not be implemented or required. Compared to the proposed project, the No Project/No Development Alternative would result in no impacts to cultural resources and impacts would be reduced compared to the proposed project.

Energy

Under the No Project/No Development Alternative, there would be no energy use associated with construction and operation since no development would occur. While impacts under the proposed project related to energy use were determined to be less than significant, they would be eliminated under this alternative since there would be no energy use. Compared to the proposed project, the No Project/No Development Alternative would eliminate the energy use identified for the project and there would be no energy impacts.

Geology and Soils

Under the No Project/No Development Alternative, the project site would remain in its current state. Existing topography and on-site soils would not be modified to accommodate proposed development. Potential impacts to unknown paleontological resources (Impact GEO-1) that were identified for the proposed project would be avoided under this alternative, as there would be no ground disturbing

activities. Compared to the proposed project, the No Project/No Development Alternative would reduce potential impacts related to geology and soils.

Greenhouse Gas Emissions

Under the No Project/No Development Alternative, GHG emissions associated with construction and operational activities would not occur. This alternative would not introduce any people or uses to the site that would generate GHG emissions. The proposed project's GHG impacts were determined to be less than significant. Compared to the proposed project, the No Project/No Development Alternative would result in a reduction of GHG emissions on the site and no impact would occur.

Hazards and Hazardous Materials

Under the No Project/No Development Alternative, no uses would be introduced that could result in the use or generation of hazardous materials. While the proposed project's hazards and hazardous materials impacts were determined to be less than significant, this alternative would further minimize potential impacts related to hazards and hazardous materials, and no impact would occur.

Hydrology and Water Quality

Under the No Project/No Development Alternative, no development would occur, and no impervious surfaces would be created. The existing on-site hydrologic conditions, drainage patterns, and drainage volumes would remain unaltered. Water quality would also remain unchanged. While the proposed project's hydrology and water quality impacts were determined to be less than significant, this alternative would further minimize potential impacts related to hydrology and water quality, and no impact would occur.

Land Use and Planning

Under this alternative, the project site would remain undeveloped and none of the discretionary approvals identified for the project would be required. The General Plan Amendment to change the designations of the site from Mixed Use 3 (MU3) designation to Mixed Use 2 (MU2) and a rezone to change the existing Mixed Use 3 (SP) (MU-3 (SP)) zoning to Mixed Use 2 (MU-2) would not be required. While the proposed project's land use and planning impacts were determined to be less than significant, this alternative would further minimize potential impacts related to land use and planning, and no impact would occur.

Noise

The project site is currently vacant and does not generate any noise. Under the No Project/No Development Alternative, the project site would remain undeveloped and would not create any new sources of construction or operational noise. While noise impacts were determined to be less than significant for the project, this alternative would eliminate any new noise sources on the project site. No noise impacts would occur under this alternative. As such, noise impacts under this alternative would be reduced as compared to the proposed project.

Population and Housing

The project site is currently vacant and located adjacent to commercial and residential uses. The No Project/No Development Alternative would not induce population growth in the area, as no development would occur. As described in Section 3.12, Population and Housing, the proposed project

would add an additional 369 people on site but would not result in substantial population growth in the area. No housing would be added to the site under the No Project/No Development Alternative, so this alternative would not contribute to meeting regional housing demands, including the provision of affordable units. However, because this alternative does not result in the addition of people on site, impacts would be reduced compared to the proposed project. No population and housing impacts would occur under the No Project/No Development Alternative.

Public Services

The No Project/No Development Alternative would not result in an increase in demand for public services, since no residential or commercial uses would be developed and there would be no increase in the City's population. Specifically, the No Project/No Development Alternative would not increase the demand for police and fire protection services, nor would this alternative increase demand for park, school, and library services. As stated in Section 3.13, Public Services, public service impacts for the proposed project would be less than significant. Since this alternative would not result in additional residents on site, impacts on public services would be reduced, compared to the proposed project. No public services impacts would occur under the No Project/No Development Alternative.

Recreation

Under the No Project/No Development Alternative, there would not be an increase in demand for park and recreation services as no new housing or residents would be added to the City. Compared to the proposed project, the No Project/No Development Alternative would decrease impacts, and no impacts to recreation would occur.

Transportation

The No Project/No Development Alternative would not result in the generation of vehicular trips. This alternative would not provide for pedestrian improvements along the project frontage, thus leaving the sidewalk between N. Pacific Street and N. Rancho Santa Fe Road on the north side of Capalina Road incomplete. Additionally, under this alternative there would be no restriping and extension of the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road. While the proposed project would have less than significant transportation impacts, this alternative would have no impact related to transportation. However, under this alternative the pedestrian improvements discussed above would not be realized.

Tribal Cultural Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. Therefore, there would be no potential to impact unknown tribal cultural resources potentially located within the project site (Impacts TCR-1 and TCR-2). As such, mitigation measures MM-CR-1 through MM-CR-4 would not be implemented or required. No impact would occur, and compared to the proposed project, the No Project/No Development Alternative would result in a reduced level of potential impact to tribal cultural resources.

Utilities and Service Systems

No development would be constructed under the No Project/No Development Alternative. As such, there would be no increase in demand for water service, wastewater service, stormwater capacity, energy, and solid waste handling services. As discussed in Section 3.17.4, project impacts related to utilities and services systems were determined to be less than significant. Because no development

would occur under this alternative, the demand for utilities would be eliminated. Thus, impacts to utilities and service systems would be reduced compared to the proposed project. No utilities and service system impacts would occur for the No Project/No Development Alternative.

Conclusion

Since the No Project/No Development Alternative would not develop any residential or commercial uses on the project site, overall impacts would be less than those of the proposed project or eliminated entirely. There are some benefits of the project that would not be realized under this alternative, including providing additional housing units, including affordable units, which helps the City meet its Regional Housing Need Allocation numbers. Under this alternative, the frontage improvements, including a sidewalk along Capalina Road, and restriping and extension of the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road would not be realized. Under this alternative there would not be any payment of the City's PFF, which goes toward supporting a variety of services and improvements in the City, including but not limited to Circulation Streets, State Route78 Interchanges, National Pollutant Discharge Elimination System, Tech Improvements, and Parks, and Habitat Conservation. Payment of these fees provide improvements that benefit all residents of the city. Similarly, this alternative would not contribute any school fees. Finally, this alternative would not meet any of the project objectives (**Table 4-1**).

4.3.4 No Project/Existing Plan Alternative

Under the No Project/Existing Plan Alternative, the project site would be developed consistent with the site's existing land use designation. Per the City's General Plan, the project site has an existing General Plan Land Use designation of Mixed Use 3 (MU3), which is a mixed-use non-residential designation with a maximum floor area ratio (FAR) of 1.50. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation "Provides for a variety of commercial and office uses integrated as a cohesive development. These uses may be mixed 'vertically' (on separate floors of a building) or 'horizontally' (on a single site or adjacent parcels). Structured parking, while not required to achieve the maximum FAR, may be allowed. Shared parking arrangements may also be allowed consistent with the nature of mixed uses. Typical uses include retail, commercial services, administrative and office uses, institutional and government uses, business support and financial uses, restaurants, and health care facilities. To maintain a pedestrian scale and orientation, retail and other active services are encouraged at street level. This designation does not allow residential uses. A Specific Plan is required for development" (City of San Marcos 2012).

Figure 4-1 presents a development concept that would meet the MU-3 (SP) zoning requirements. It would include a four-story mixed-use office building with 90,000 square feet (s.f.) of office use and 10,000 s.f. of retail uses along the Capalina Road frontage, with a FAR of 1.5. Up to 400 parking spaces would be required and would be a mix of structured parking and ground-level parking. For the structured parking, one level would be subterranean. Access would be from Capalina Road. Overall, the development footprint would be the same, however, more grading and excavation would be required to provide subterranean parking.

4.3.4.1 Comparison of the Effects of the No Project/Existing Plan Alternative to the Proposed Project

Aesthetics

The No Project/Existing Plan Alternative would develop a four-story building, with one story of office over a three-story parking structure, with one story below grade. The 10,000 s.f. of retail would be

located along the Capalina Road frontage. It is anticipated that architectural treatments would be used to break up the bulk and scale of the building and that a landscape concept plan would also be implemented. Similar to the proposed project, this alternative would incorporate lighting for safety, security and way finding. Lighting would be required to comply with the City's Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080 to minimize light pollution. The No Project/Existing Plan Alternative would have a similar level of aesthetics impact as the proposed project and those impacts would be less than significant.

Air Quality

Under the No Project/Existing Plan Alternative, air pollutant emissions associated with project construction including emissions associated with grading, site preparation, site finishing and building finishing would still occur. Grading activities would be more intensive since greater excavation would be required to accommodate below-grade parking, and construction emissions would be increased compared to the proposed project.

Emissions from vehicles going to and from the project site typically account for the largest portion of air quality emissions. The Local Transportation Analysis (CR Associates 2023a) calculated potential ADT under the existing General Plan land use on the project site. Vehicular trips under the Existing Plan Alternative would be higher than the proposed project. This alternative would generate approximately 2,200 ADT compared to the 874 ADT anticipated for the project, or more than double the amount. As such, because this alternative would result in an increase of ADT on site, operational air pollutant emissions would be greater when compared to the proposed project. However, operational and construction air pollutant emissions under this alternative would still be less than significant.

Additionally, office and retail uses are not typically sources that create odors or significant air emissions from their day-to-day operations. Similar to the proposed project, impacts related to odors would be less than significant under this alternative.

Biological Resources

Since it would have a similar footprint of disturbance, the No Project/Existing Plan Alternative would have a similar level of biological resources impacts as the proposed project, including a potential for impact to nesting birds. Biological resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measure MM-BIO-1) and would reduce the potential impact to below a level of significance. The No Project/Existing Plan Alternative would have a similar level of biological resources impacts as the proposed project, which is less than significant with incorporation of mitigation.

Cultural Resources

The No Project/Existing Plan Alternative would require a greater subsurface depth of disturbance than the proposed project due to sub-surface parking being required. Therefore, the potential to impact unknown archaeological resources potentially located within the project site as well as unidentified human remains would occur under this alternative. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1 through MM-CR-4) and would reduce the impacts to below a level of significance. The No Project/Existing Plan Alternative would have a similar level of cultural resources impacts as the proposed project.

Energy

Construction of the No Project/Existing Plan Alternative would include more intense grading and excavation activities and soil hauling than the proposed project due to the inclusion of a subterranean parking level. Therefore, construction-related energy use would be greater than the proposed project. Operationally, office and retail uses have a higher energy demand than residential uses. Additionally, since this alternative would generate more than double the ADT compared to the proposed project, fuel use would be higher under this alternative. Compared to the proposed project, energy demand would be higher with the No Project/Existing Plan Alternative. Nonetheless, similar to the proposed project, this alternative would incorporate energy conservation features consistent with the requirements of Title 24 and the City's Climate Action Plan (CAP) and would not result in the wasteful or inefficient use of energy or a conflict with a state or local plan for energy efficiency. Impacts are expected to be less than significant.

Geology and Soils

Under the No Project/Existing Plan Alternative ground-disturbance would be required for construction of the mixed-use office and retail development. Development under this alternative would be required to implement the recommendations from the preliminary geotechnical investigation (AGS 2022). These recommendations include general provisions related to the site as well as specific recommendations related to foundation design, concrete design, and corrosion. Compliance with the recommendations of the preliminary geotechnical investigation would ensure that seismic and soils hazards would be addressed through project design and impacts related to geological and soils hazards would be less than significant, similar to the proposed project.

Since sedimentary rock units of the Santiago Formation may contain paleontological resources, there is a potential that the site could contain paleontological resources that could be disturbed during grading activities. Similar to the proposed project, this alternative would need to implement mitigation measure MM-GEO-1. Compared to the proposed project, this alternative would result in the same level of impacts to geology and soils, which is less than significant with the incorporation of mitigation.

Greenhouse Gas Emissions

Under the No Project/Existing Plan Alternative, greater construction-related GHG emissions are anticipated since more grading and excavation would be required to create subterranean parking. Operationally, office and retail uses are not typically sources that create significant GHG emissions from their day-to-day operations. Emissions from vehicles going to and from the project site typically account for the largest portion of GHG emissions. The Local Transportation Analysis determined that the potential ADT under the existing General Plan land use on the project site would be higher than the proposed project. This alternative would generate approximately 2,200 ADT compared to the 874 ADT anticipated for the project, or more than double the amount (CR Associates 2023a). As such, because this alternative would result in an increase of ADT on site, GHG emissions would be greater when compared to the proposed project. However, GHG impacts under this alternative would be less than significant.

Hazards and Hazardous Materials

The project site is currently vacant and is not listed on any hazardous materials sites. Construction and operation of an office and retail/commercial use, as contemplated under the No Project/Existing Plan Alternative, is not expected to result in the release of any significant hazardous materials or the

routine transport, use, or disposal of such materials. Development under this alternative would not result in any safety hazards resulting from proximity to the McClellan-Palomar Airport, nor would this alternative impair implementation of or physically interfere with emergency response or evacuation plans. Development under this alternative would be constructed in accordance with all applicable fire codes and would incorporate an appropriate fire fuel modification zone. Impacts related to hazards and hazardous material would be less than significant for this alternative and would be similar to the proposed project.

Hydrology and Water Quality

The No Project/Existing Plan Alternative would introduce impervious surfaces at the site in a similar quantity as the proposed project. And the existing on-site hydrologic conditions, drainage patterns, and drainage volumes would be modified. It is expected that this alternative would incorporate all required and applicable best management practices in order to avoid any violations of water quality standards or otherwise modify or adversely affect surface and groundwater quality, similar to the proposed project. As compared to the proposed project, this alternative would result in similar impacts and the impacts would be less than significant.

Land Use and Planning

Under the No Project/Existing Plan Alternative, a General Plan Amendment and Rezone would not be required as the development would be consistent with the General Plan and zoning designation assigned to the project site. Depending on the proposed office and commercial use, a Conditional Use Permit could be required.

Development under this alternative would generate more traffic (2,200 ADT compared to 874 ADT) than the proposed project. However, it is anticipated that adequate level of service performance would still occur on area roadways and intersections. Development under this alternative would still be required to participate in Community Facility District: CFD2011-01 (Congestion Management).

This alternative would have a similar level of impact as the proposed project, which is less than significant.

Noise

Construction-related noise under the No Project/Existing Plan Alternative would be similar to the proposed project, since grading activities would still be required, and similar types of equipment would be used. Overall, the duration of construction-related noise would be longer since more grading and excavation would be required to accommodate sub-surface parking. However, similar to the proposed project, construction noise impacts would be less than significant under this alternative.

The No Project/Existing Plan Alternative would generate operational noise from office and retail/commercial activities as well as vehicle trips generated by the project. Commercial uses, including office and retail, have an exterior noise standard of 65 dBA Leq. For non-residential noise sensitive land uses, such as those that would be developed under this alternative, the exterior noise level is defined as noise measured at the exterior area provided for public use (City of San Marcos 2017).

This alternative would generate more than double the ADT as the project (2,200 ADT compared to 874 ADT). Therefore, offsite noise generated by the project would be higher under this alternative than the proposed project. Operationally, an office and retail/commercial development would typically have

more daily activity compared to a residential project, which could result in more operational noise. Additionally, such buildings would typically require larger heating, ventilation, and air conditioning (HVAC) equipment, which can result in more noise compared to residential buildings. However, such operational activities are not anticipated to be significant and HVAC equipment is typically shielded with rooftop parapets or other barriers which help to minimize noise.

Compared to the proposed project, this alternative would have a similar level of impact as the proposed project.

Population and Housing

The No Project/Existing Plan Alternative would develop the site in a manner that is consistent with the City's General Plan and would, therefore, have been considered in the City's growth assumptions. The No Project/Existing Plan Alternative would not directly increase the population because no residential uses are included. The No Project/Existing Plan Alternative would not create market rate/work force housing, nor would it create affordable housing units on the project site, which is needed by the City to meet its Regional Housing Needs Allocation goals. Compared to the proposed project, this alternative would have no impact related to unplanned population growth and impacts would be reduced compared to the proposed project .

Public Services

Similar to the proposed project, the No Project/Existing Plan Alternative would result in an increase in demand for public services, due to the construction of office and retail/commercial uses. Specifically, this alternative would increase the demand for police and fire protection services over existing conditions. Residential uses are the primary driver for demand for park, library, and school services. Since no residences would be constructed under this alternative, there would be no increase in demand for school, park, and library services. Development under this alternative would still be required to pay applicable PFF and school fees, though the school fees would be at a reduced rate compared to the proposed project, since no residential uses are proposed. Compared to the proposed project, this alternative would result in similar demand for fire and police services and decreased demand for park, library, and school services. Overall, impacts to public services would be less than significant.

Recreation

The No Project/Existing Plan Alternative is not anticipated to generate an increase in demand of recreational needs compared to the proposed project as no residential uses would be proposed. Residential uses are the primary driver for demand for park and recreation services. Compared to the proposed project, this alternative would decrease the demand for park and recreation service and impacts would be less than significant.

Transportation

Under the No Project/Existing Plan Alternative, impacts associated with consistency with policies in the Mobility Element of the General Plan that address LOS are still anticipated to be less than significant. Development under this scenario would still be required to construct the sidewalk along the site frontage with Capalina Road and restripe and extend the westbound left turn pocket on Capalina Road at N. Rancho Santa Fe Road. Development under this alternative would generate more traffic than the proposed project (2,200 ADT compared to 874 ADT).

With regard to Vehicle Miles Traveled (VMT), based upon San Diego Association of Governments (SANDAG) screening maps, the regional mean VMT for employees is 18.9 VMT per employee. For the census tract where the project site is located, the VMT per employee would be 16.8, which is 89% of the regional mean (SANDAG 2023). This means that mitigation would be required to reduce the VMT to 16.07, which would be 85% of the regional mean and below the VMT significance threshold. It is expected that a 4% reduction could be achieved through a mix of mitigation measures such as employer carpool/vanpool programs, employer transit subsidies, and telecommute/alternative work schedules. Even with these reductions, development under the No Project/Existing Plan Alternative would result in more VMT compared to the project. This alternative would have increased VMT impacts compared to the proposed project, and impacts would be less than significant with mitigation.

Tribal Cultural Resources

- The No Project/Existing Plan Alternative would result in a greater subsurface depth of disturbance than the proposed project. Therefore, this alternative would have the potential to impact unknown tribal cultural resources potentially located within the project site during construction. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (MM-CR-1 through MM-CR-4) and would reduce the impacts to below a level of significance. The No Project/Existing Plan Alternative would have a similar level of impacts to tribal cultural resources as the proposed project, which is less than significant with incorporation of mitigation.

Utilities and Service Systems

The No Project/Existing Plan Alternative would result in an increase in demand for utilities and service systems, including water, wastewater, stormwater infrastructure, and solid waste service over existing conditions through the development of new office and retail/commercial uses. Based upon the water/sewer technical memorandum prepared by VWD (2023), development sewer generation, according to assumptions in their 2018 Master Plan, which were based upon existing land use designations for the site, would be 3,012 gallons per day (gpd) for this alternative and 20,370 gpd for the project. Water demand would be 3,765 under this alternative and 22,650 gpd under the proposed project. Therefore, the demand for sewer and water services would be decreased under this alternative compared to the proposed project, however, the water and sewer line upgrades identified for the proposed project in the VWD technical memorandum (2023) would also be required for this alternative.

Storm water infrastructure demands are anticipated to be similar to the proposed project as a similar amount of impervious surface would be created. Solid waste generation would not differ significantly under this alternative. Utilities and service system impacts would be less than significant under the No Project/Existing Plan Alternative and would water and sewer demand would be reduced compared to the proposed project.

Conclusion

The No Project/Existing Plan Alternative would result in a more intensive use on the project site, including more than double the trip generation compared to the proposed project (2,200 ADT compared to 874 ADT). This results in a corresponding proportional increase in air pollutant and GHG emissions and noise from vehicles compared to the proposed project. Construction-related air pollutant and GHG emission are also expected to be greater since this alternative would require more grading and excavation to accommodate subterranean parking.

Footprint-specific impacts, such as those related to biological resources, cultural and tribal cultural resources, and geology and soils would be similar as the proposed project, as the same amount of site area would be disturbed.

This alternative would not generate any students for SMUSD and would reduce demand for parks, libraries, water, and sewer services compared to the proposed project. This alternative would result in a VMT impact and require mitigation to reduce VMT to 85% of the regional mean for employees. This alternative does not meet any of the project objectives, as shown in Table 4-1.

4.3.5 Reduced Intensity Alternative

Under the Reduced Intensity Alternative, the project site would be developed with 75 residential apartments and 4,000 s.f. of commercial use for a density of 30 du/acre. The project proposes a density of 47 du/acre. A General Plan Amendment and Rezone would be required for this alternative to change the site from MU-3 to MU-2. Overall, the development footprint and area of disturbance would be similar to that of the proposed project, but with less density of residential units. The building would still be four-stories high, which would allow for larger units. Private and common open space would be provided consistent with the City's Outdoor Space Standards (Section 20.255.120 of the San Marcos Municipal Code). Architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development.

4.3.5.1 Comparison of the Effects of the Reduced Intensity Alternative to the Proposed Project

Aesthetics

Development under the Reduced Intensity Alternative would include 75 residential units and 4,000 s.f. of commercial use. Compared to the proposed project, there would be less overall development intensity on the project site, however a four-story building is still anticipated to be required. Similar to the proposed project, architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development. Similar to the proposed project, this alternative would incorporate lighting for safety, security and way finding. Lighting would be required to comply with the City's Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080 to minimize light pollution. The Reduced Intensity Alternative would have a similar level of aesthetics impacts as the proposed project and impacts would be less than significant.

Air Quality

Under the Reduced Intensity Alternative, air pollutant emissions associated with construction including emissions associated with grading, site preparation, site finishing and building finishing would still occur and would be reduced compared to the proposed project due to the reduced development.

Operational emissions under this alternative would also be reduced compared to the proposed project as fewer residential units would be constructed. Vehicular trips under the Reduced Intensity Alternative would be lower than the proposed project. This alternative would generate 610 ADT. Compared to the proposed project, which would generate 874 ADT, this alternative would reduce ADT by 30%. As such, because this alternative would result in a decrease of development intensity and associated ADT, operational air pollutant emissions would be reduced when compared to the proposed project and impacts would be less than significant.

Biological Resources

The Reduced Intensity Alternative would have a similar level of biological resources impacts as the proposed project, since it would have a similar footprint of disturbance, including a potential for impact to nesting birds. Biological resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measure MM-BIO-1) and would reduce the potential impact to below a level of significance. The Reduced Intensity Alternative would have a similar level of biological resources impacts as the proposed project, and impacts would be less than significant with mitigation.

Cultural Resources

The Reduced Intensity Alternative would result in a similar amount of ground disturbance as the proposed project. Therefore, impact unknown archaeological resources potentially located within the project site as well as unidentified human remains would still occur. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (MM-CR-1 through MM-CR-4) and would reduce the impacts to below a level of significance. The Reduced Intensity Alternative would have a similar level of cultural resources impact as the proposed project, and impacts would be less than significant with mitigation.

Energy

The Reduced Intensity Alternative would result in reduced construction-related energy demands compared to the proposed project due to the reduced density and construction activities required. Likewise, energy use associated with operation of the Reduced Intensity Alternative would be less compared to the proposed project since the number of units would be decreased from 119 units to 75 units. Similarly, vehicle fuel use would be reduced since this alternative would reduce the number of trips by approximately 30%. Similar to the proposed project, this alternative would incorporate energy conservation features consistent with the requirements of Title 24 and the City's CAP and would not result in the wasteful or inefficient use of energy or a conflict with a state or local plan for energy efficiency. Compared to the proposed project, the Reduced Intensity Alternative reduces the amount of energy used and impacts would be less than significant.

Geology and Soils

The Reduced Intensity Alternative would be required to implement the recommendations from the preliminary geotechnical investigation (AGS 2022). These recommendations include general provisions related to the site as well as specific recommendations related to foundation design, concrete design, and corrosion. Compliance with the recommendations of the preliminary geotechnical investigation would ensure that seismic and soils hazards would be addressed through project design and impacts related to geological and soils hazards would be less than significant, similar to the proposed project.

Due to the fact that the sedimentary rock units of the Santiago Formation may contain paleontological resources, there is a potential that the site could contain paleontological resources that could be disturbed during grading activities. Similar to the proposed project, this alternative would need to implement mitigation measure MM-GEO-1 and impacts to paleontological resources would be less than significant with mitigation. Compared to the proposed project, this alternative would result in the same level of impacts related to geology and soils.

Greenhouse Gas Emissions

Under the Reduced Intensity Alternative, GHG emissions associated with project construction would be reduced compared to the proposed project due to the reduced density and construction activities required. Operational GHG emissions under this alternative would also be reduced due to the reduction in residential units. In particular, GHG emissions associated with vehicular trips under the Reduced Intensity Alternative would be lower than the proposed project. This alternative would generate 610 ADT. Compared to the proposed project, which generates 874 ADT, this alternative would reduce ADT by 30%. As such, because this alternative would result in a decrease of ADT, vehicular-related GHG would be reduced when compared to the proposed project. GHG emissions would be reduced compared to the proposed project, and impacts would be less than significant.

Hazards and Hazardous Materials

The project site is currently vacant and is not listed on any hazardous materials sites. Construction and operation of this alternative would result in a similar level of hazards and hazardous materials risk as the proposed project since a similar type of use is proposed (residential and commercial use). Development under this alternative would not result in any safety hazards resulting from proximity to the McClellan-Palomar Airport, nor would this alternative impair implementation of or physically interfere with emergency response or evacuation plans. Development under this alternative would be constructed in accordance with all applicable fire codes and would incorporate an appropriate fire fuel modification zone. Impacts related to hazards and hazardous material would be less than significant for this alternative and would be similar to the proposed project.

Hydrology and Water Quality

The Reduced Intensity Alternative would introduce impervious surfaces at the site. The amount of impervious surface would be similar to the amount anticipated for the proposed project. The existing on-site hydrologic conditions, drainage patterns, and drainage volumes would be modified. It is expected that this alternative would incorporate all required and applicable best management practices in order to avoid any violations of water quality standards or otherwise modify or adversely affect surface and groundwater quality, similar to the proposed project. As compared to the proposed project, this alternative would result in similar hydrology and water quality impacts and the impacts would be less than significant.

Land Use and Planning

Under the Reduced Intensity Alternative, a General Plan Amendment and Rezone would still be required. This alternative would generate 610 ADT. Compared to the proposed project, which generates 874 ADT, this alternative would reduce ADT by 30%. The proposed project did not require any improvements to maintain adequate LOS on area roadways and intersections. Since the Reduced Intensity Alternative would generate less ADT, a similar conclusion would be made for this alternative and there would be no inconsistencies with the Mobility Element of the General Plan. The proposed project would also be consistent with the other applicable policies and goals of the General Plan, as it would include similar uses and features as the proposed project. This alternative would have a similar level of land use and planning impact as the proposed project and impacts would be less than significant.

Noise

Construction-related noise under the Reduced Intensity Alternative is expected to result in a similar maximum level of noise as the proposed project, though construction may be of a shorter duration since less development is proposed. Similar to the proposed project, potential construction-related noise impacts would be reduced to below a level of significance through adherence to municipal code requirements for construction noise.

Stationary operational-related noise under this alternative would be similar to the proposed project since a similar use is proposed. However, since fewer residential units would be constructed, vehicular-related noise under the Reduced Intensity Alternative would be lower than the proposed project. This alternative would generate 610 ADT. Compared to the proposed project, which generates 874 ADT, this alternative would reduce ADT by 30%. As such, because this alternative would result in a decrease of ADT, vehicular-related noise would be reduced when compared to the proposed project and impacts would be less than significant.

Population and Housing

The Reduced Intensity Alternative would result in an increase in the population of the City by approximately 233 residents, whereas the proposed project would increase the population by approximately 369 residents. However, increased population associated with the proposed project was determined to be less than significant. Compared to the proposed project, this alternative would have a reduced level of impact related to unplanned population growth and impacts would be less than significant.

Public Services

Similar to the proposed project, the Reduced Intensity Alternative would result in an increase in demand for public services due to the construction of residential uses on the project site. Specifically, this alternative would increase the demand for police and fire protection, school, park, and library services over existing conditions. Compared to the proposed project, fewer residents and students would be generated since fewer residential units would be constructed, and demand for public services would be reduced. Development under this alternative would still be required to pay applicable PFF and school fees, which would help offset demand for public services. Similar to the proposed project, impacts would be less than significant.

Recreation

Similar to the proposed project, the Reduced Intensity Alternative would result in an increase in demand for park and recreation facilities. Development under this alternative would still be required to pay applicable PFF. Additionally, this alternative would be required to provide common open space and private open space per City requirements, which would offset demand for park and recreational facilities. Similar to the proposed project, impacts would be less than significant.

Transportation

Under the Reduced Intensity Alternative, impacts associated with consistency with policies in the Mobility Element of the General Plan that address LOS are expected to be less than significant. Development under this scenario would screen out of a VMT assessment through the use of SANDAG maps. As discussed in Section 3.15, Transportation, the project site is located within a census tract with a resident VMT of 12.5 VMT/Capita, which is 66.2% of the regional average and below the VMT

significance threshold (CRA 2023b). Compared to the proposed project, this alternative would generate less VMT overall, since fewer units would be constructed, and impacts would be less than significant.

Tribal Cultural Resources

The Reduced Intensity Alternative would result in similar ground disturbance as the proposed project. Therefore, the potential to impact unknown tribal cultural resources potentially located within the project site would still occur. Tribal cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1 through MM-CR-4) and would reduce the impacts to below a level of significance. The Reduced Intensity Alternative would have a similar level of tribal cultural resources impacts as the proposed project and impacts would be less than significant with mitigation.

Utilities and Service Systems

The Reduced Intensity Alternative would result in an increase in demand for utilities and service systems, including water, wastewater, stormwater infrastructure, and solid waste service through the development of 75 residential units and 4,000 s.f. However, compared to the project, this alternative would decrease the overall demand since fewer residences would be constructed. Development under this alternative would still be required to pay all applicable water and sewer fees and it is expected that the sewer and water line upgrades identified for the project would be applicable to this alternative. Storm water infrastructure demand is anticipated to be similar to the proposed project as a similar amount of impervious surface would be created. Solid waste generated would be reduced under this alternative. Utilities and service system impacts would be less than significant under the Reduced Intensity Alternative, and would be reduced compared to the proposed project.

Conclusion

The Reduced Intensity Alternative would reduce the number of residential units constructed on the project site. This results in a corresponding decrease in vehicular trips by approximately 30% and a corresponding decrease in air pollutant and GHG emissions and noise from offsite traffic compared to the proposed project. Public services, utilities and service systems, and energy demands would also be proportionally decreased. Footprint specific impacts, such as those related to biological resources, cultural and tribal cultural resources, and geology and soils would be similar as the proposed project since a similar area of disturbance would occur under this alternative. This alternative would contribute less PFF and school fees since fewer residential units would be constructed. This alternative would meet the majority of the project objectives as detailed in Table 4-1.

4.4 Alternatives Considered But Rejected

CEQA Guidelines Section 15126.6(c) provides guidance in selecting a range of reasonable alternatives for the project. An EIR should also identify any alternatives that were considered by the lead agency, but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. CEQA Guidelines Section 15126.6(c) provides the following guidance in selecting a range of reasonable alternatives for the project. There are many factors that may be taken into account when addressing the feasibility of range of potential alternatives for the project, such as site suitability, economic viability, availability of

infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). The alternatives discussion shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. An EIR should also identify any alternatives that were considered by the lead agency, but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination.

The EIR need not discuss every alternative to the project. A range of alternatives that are "reasonable" for analysis have been evaluated and are discussed above in Section 4.3, Project Alternatives Considered in this EIR. The following describes other alternatives considered by the City but dismissed from further evaluation in this EIR, and a brief description of the reasons for their rejection.

4.4.1 Alternative Location

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project. There are sites within the city of an approximately equivalent size to the project site that could be redeveloped with a residential project; however, the project applicant does not control another site within the city of comparable land area that is available for development of the proposed project. One of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site."

Because the city is highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible. It should also be noted that the project site is surrounded by development and located adjacent to transportation facilities, existing, transit and utility infrastructure. As such, an alternative location was ultimately rejected from further analysis in the EIR.

4.4.2 Reduced Footprint Alternative

The Reduced Footprint Alternative would be a scenario where the development footprint would be reduced but the number of units and amount of commercial development would remain the same. This is typically done if there are sensitive habitat issues on a project site or other sensitive resources that need to be avoided. The project site does not support any sensitive habitat. Potential impacts to nesting birds would still be expected under this alternative, as would the potential for impacts to unidentified archaeological, paleontological, and tribal cultural resources to be identified during project grading for this alternative. This alternative would require greater building heights to capture the same level of development which may result in increased aesthetic impacts and incompatibility with the surrounding development. As such, a reduced footprint alternative was ultimately rejected from further analysis in the EIR.

4.4.3 Park Use Alternative

During the Notice of Preparation comment period, one commenter suggested a park be built instead of a residential project. The project site has always been intended for development, as evidenced by the Mixed Use 3 General Plan and Zoning designation on the project site. Additionally, this site is not contemplated as a future park in the City of San Marcos's Parks Master Plan (City of San Marcos 2018). As such, a park use alternative was ultimately rejected from further analysis in the EIR.

4.5 Environmentally Superior Alternative

Table 4-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As shown in Tables 4-1 and 4-2, the No Project/No Development Alternative would eliminate all of the potentially significant impacts identified for the project. However, the No Project/No Development Alternative would not meet any of the project objectives. Additionally, there is no certainty that the project site would remain undeveloped in perpetuity. CEQA Guidelines Section 15126.6(e)(2) states that if the No Project alternative is identified as the environmentally superior alternative, then an environmentally superior alternative should be identified among the other alternatives.

Among the other alternatives, not including the proposed project, the Reduced Intensity Alternative is the environmentally superior alternative because it would provide a reduced level of impact in some environmental analysis areas including air quality, GHG, noise, public services, recreation, and utilities/service systems. Mitigation measures would still be required to mitigate impacts to biological resources, cultural resources, geology and soils, tribal cultural resources.

Table 4-1. Summary of Alternatives and Project Objectives

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Intensity Alternative
Provide a multi-family housing opportunity through a range of unit types, sizes, and number of different bedroom counts, including studios, one, two, and, three-bedroom units, as well as a range of affordability to accommodate a full spectrum of family demographics to contribute to the growing housing needs of the region.	Meets objective	Does not meet this objective	Does not meet this objective	Meets objective
Integrate high-density housing opportunities and commercial uses close to major transit corridors, education facilities, and job centers to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce energy usage, air pollutions and greenhouse gas emissions.	Meets objective	Does not meet this objective	Does not meet this objective	Partially meets this objective
To the extent possible given the site constraints, maximize the opportunity to provide high-density housing for the City of San Marcos in the 45-50 dwelling unit/acre density range.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective
Support the housing needs of the City of San Marcos and the region by developing high-quality, workforce housing that balances density with price-points and long-term maintenance costs, such that new apartments remain financially attainable.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective
Incorporate deed restricted affordable housing into a portion of the proposed project.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective

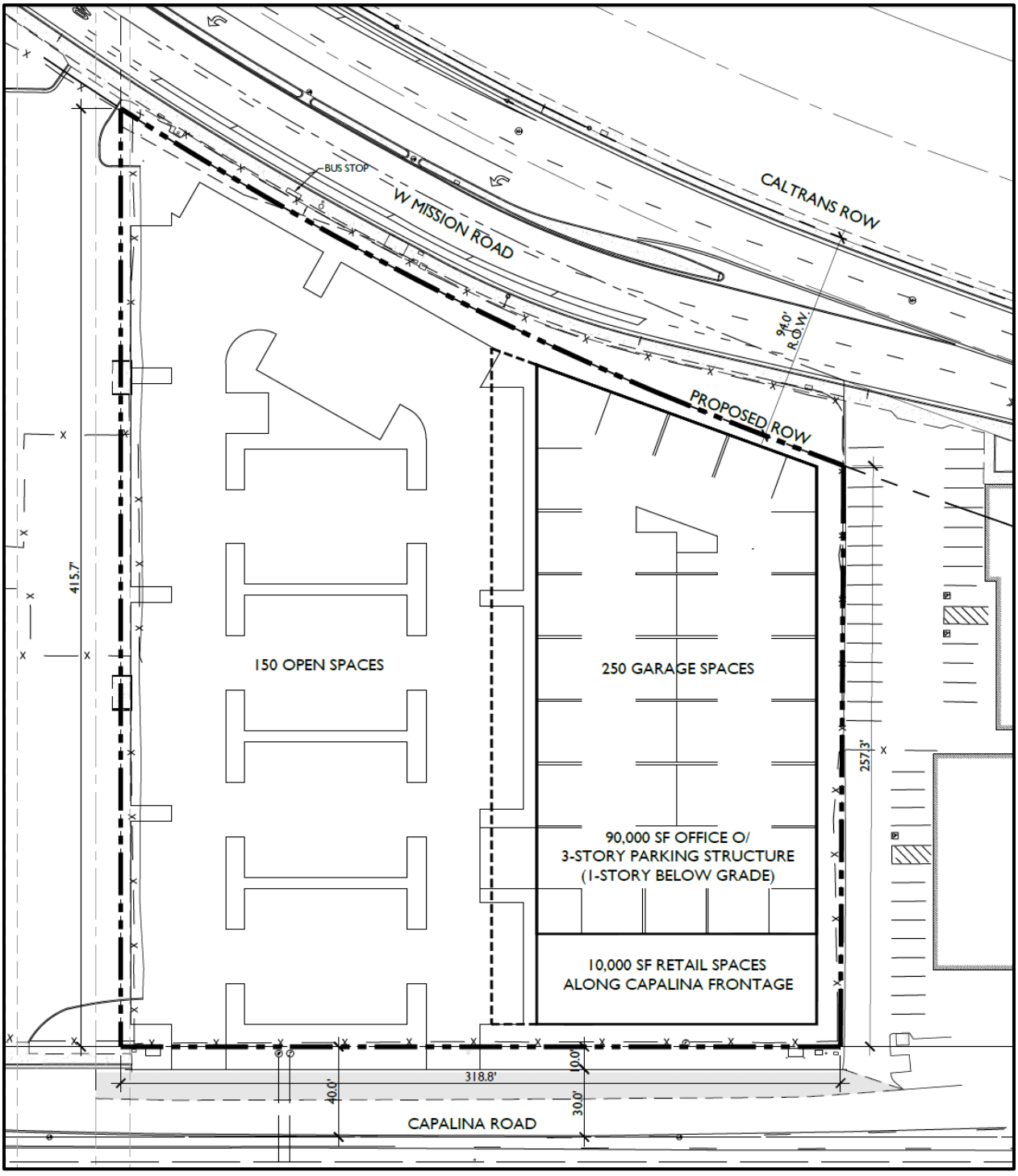
Table 4-2. Comparison of Impacts of Proposed Project and Alternatives

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative	Reduced Intensity Alternative
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Air Quality	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Energy	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Geology and Soils	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Greenhouse Gas Emissions	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Hazards and Hazardous Materials	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Hydrology and Water Quality	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Land Use and Planning	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Same)
Noise	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Population and Housing	LTS	No Impact (Reduced)	No impact (Reduced)	LTS (Reduced)
Public Services	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)
Recreation	LTS	No Impact (Reduced)	No Impact (Reduced)	LTS (Reduced)

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative	Reduced Intensity Alternative
Transportation	LTS	No Impact (Reduced)	LTSM (Increased)	LTS (Reduced)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)

Notes: Impact Status: LTS = Less than significant impact; LTSM = Less than significant with mitigation

Figure 4-1. No Project/Existing Plan Alternative – Development Concept



5.0 Environmental Effects Found not to be Significant

The City of San Marcos completed an Initial Study (IS) for the proposed project in accordance with Sections 21000-21189 of the Public Resources Code and Section 15063 of the California Environmental Quality Act (CEQA) Guidelines. A Notice of Preparation (NOP) was prepared by the City and mailed to applicable agencies, organizations, and neighboring property owners. The NOP is included in Appendix C of this Environmental Impact Report (EIR).[21]

As required by Section 15128 of the CEQA Guidelines, the following is a discussion of the environmental effects that were considered as a part of the Initial Study but were determined to have "No Impact", and, therefore, are not discussed in detail in this EIR.

In some instances, complete environmental issue areas were eliminated during the IS process, including agriculture/forestry resources and mineral resources. In other instances, some of the specific CEQA thresholds were eliminated during the IS process.

5.1 Aesthetics

Threshold of Significance: Have a substantial adverse impact on a scenic vista.

The project site is located within the Business/Industrial Neighborhood in the city. The City has a Ridgeline Protection and Management Overlay Zone to protect natural viewsheds and unique natural resources, minimize physical impacts to ridgelines, and to establish innovative sensitive architectures standards. The project site is not located in the Ridgeline Protection and Management Overlay Zone. Further, the project site does not include any primary or secondary ridgelines, as identified in Figure 4-5 of the Conservation and Open Space Element of the General Plan (San Marcos 2012). Therefore, development of the project site would not have a substantial adverse effect on a scenic vista and impacts would be less than significant

Threshold of Significance: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.

The project site is located approximately 800 feet north of State Route 78 (SR-78). A portion of SR-78 is recognized as a Scenic Highway by Caltrans; however, that portion is not in the project vicinity. The portion identified as a Scenic Highway is approximately 50 miles east of the project site near Anza Borrego (Caltrans 2020). At a local level, SR-78 is designated by the City of San Marcos as a view corridor. The highway corridor provides a view of the Merriam Mountains, Mount Whitney, and Double Peak. There are no scenic resources on the project site. The project site is undeveloped and does not support any historic buildings (Dudek 2023c). In summary, the project would not damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. No impact would occur.

[21] The Initial Study, NOP, and comment letters received on the NOP are included in Appendix B and C of this EIR.

5.2 Agriculture and Forestry Resources

Threshold of Significance: 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.

The project site is not mapped as prime farmland, unique farmland, or farmland of statewide importance, as determined by the Farmland Mapping and Monitoring Program, and as shown on Figure 4-4 (Agricultural Areas) in the San Marcos General Plan (San Marcos 2012). Therefore, the project would not result in the conversion of prime farmland, unique farmland, or farmland of statewide importance. No impact is identified for this issue area.

Threshold of Significance: Conflict with existing zoning for agricultural use, or a Williamson Act contract.

The project site has a General Plan designation of Mixed Use 3 (MU3) and a zoning designation of Mixed-Use-3 (MU-3). The project site does not support zoning for agricultural use. The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The project site is not located within a Williamson Act contract area. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract.

Threshold of Significance: 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)).

Forest land is defined as "land that can support ten percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (California Public Resources Code Section 1220(g)). Timberland is defined as "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees" (California Public Resources Code Section 4526). A Timberland Production Zone is defined as "an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses" (California Public Resources Code Section 51104(g)).

The project site has a General Plan designation of Mixed Use 3 (MU3) and a zoning designation of Mixed-Use-3 (MU-3). A General Plan Amendment and Rezone is proposed for the project to change these designations to Mixed Use 2 (MU2) and Mixed-Use-2 (MU-2) respectively. The project site is not located in an area that is zoned for forest land, timber land or for timber production. Implementation of the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impact is identified and this topic.

Threshold of Significance: Result in the loss of forest land or conversation of forest land to non-forest use.

The project site does not support forests, nor is there any forest land adjacent to the project site. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impact is identified for this issue area.

Threshold of Significance: Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

The project would not result in any other changes to the existing environment that would, due to their location or nature, result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. There is no agricultural activity or forest land on the project site. No impact is identified for this issue area.

5.3 Biological Resources

Threshold of Significance: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Based upon Biological Resources Letter Report prepared by Dudek (2023a), the project site does not support any riparian habitat or other sensitive natural community. The entire 2.51-acre-site consists of disturbed habitat. As such, the project does not have the potential to result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. No impact would occur and this topic will not be further analyzed in the EIR.

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

Based upon the Biological Resources Letter Report prepared for the project (Dudek 2023a), there are no state or federally protected wetlands on the project site. The project site is completely covered with disturbed vegetation. Development of the project would not have a substantial adverse effect on state or federally protected wetlands and no impact as identified.

Threshold of Significance: 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 site is located in a developed portion of the City and is surrounded by development on all sides. Per Figure 4-2 (Wildlife Corridors and Linkages) of the Conservation and Open Space Element of the General Plan, the project site is not identified as a wildlife corridor. The project would not interfere with the movement of wildlife and no impact would occur.

A discussion of additional biological resources significance thresholds is provided in Section 3.3, Biological Resources.

5.4 Cultural Resources

Threshold of Significance: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

Based upon the cultural resources report prepared for the project (Dudek 2023c), there are no historical resources on the project site. Therefore, the project would not have the potential to cause a substantial adverse change in historic resources, as defined in Section 15064.5 of the CEQA Guidelines.

A discussion of additional cultural resources significance thresholds is provided in Section 3.4, Cultural Resources.

5.5 Geology and Soils

Threshold of Significance: 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 wastewater.

Septic tanks and alternative wastewater disposal systems are not proposed as part of the project. The project would receive wastewater service from Vallecitos Water District (VWD) and VWD has indicated they can serve the project (VWD 2023). Therefore, no impact is identified for this issue area.

A discussion of additional geology and soils significance thresholds is provided in Section 3.6, Geology and Soils.

5.6 Hydrology and Water Quality

Threshold of Significance: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin.

The project would be served by VWD for water service VWD water supplies come from the Metropolitan Water District and the San Diego County Water Authority. Both of these agencies use some groundwater for their supplies. The proposed project will be supplied from existing VWD supplies, which would have assumed the use of groundwater. The project would not develop any new groundwater wells to serve the project. Therefore, the project would not substantially deplete groundwater supplies. The project would increase the amount of impervious surfaces on the project site; however, the project would not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. No impact is identified for this issue area.

Threshold of Significance: In flood hazards, tsunami or seiche zones, risk release of pollutants due to project inundation.

Per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 06073C0789H the project site is not located within a 100-year flood hazard area (FEMA 2012). The project site is approximately 8.5 miles inland from the Pacific Ocean and would not be subject to inundation by tsunami. Given that the project site is not located near a large standing body of water,

inundation by seiche (or standing wave) is considered negligible. No impact is identified for this issue area.

A discussion of additional hydrology and water quality significance thresholds is provided in Section 3.9, Hydrology and Water Quality.

5.7 Land Use and Planning

Threshold of Significance: Physically divide an established community.

The project site is currently undeveloped. The project proposes residential and commercial uses in an area that is already developed with similar uses, and as such, would be compatible with existing uses. The project would not physically divide an established community. The project proposes the construction of a sidewalk along the project frontage that would enhance pedestrian movement in the project area, as well as a gate to provide resident access to the sidewalk on W. Mission Road and the nearby bus stop. No impact is identified for this issue area.

A discussion of additional land use and planning significance thresholds is provided in Section 3.10, Land Use and Planning.

5.8 Mineral Resources

Threshold of Significance: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state

According to the City of San Marcos General Plan Conservation & Open Space Element, the city contains land classified in all four Mineral Resource Zones (MRZ) (San Marcos 2012). California does not require that local governments protect land designated as MRZ-1, MRZ-3, or MRZ-4. However, the City is responsible for recognizing lands designated as MRZ-2 and protecting these areas from premature development incompatible with mining. The lands designated as MRZ-2 include small portions between Double Peak, Mount Whitney, and Franks Peak; and small portions in the northern Sphere of Influence within Twin Oaks Valley Neighborhood. These locations do not overlap with the project site; therefore, no loss of known mineral resources would occur. No impact is identified.

Threshold of Significance: 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 project site is not designated as a locally important mineral resource recovery site on any local general plan, specific plan, or other land use plan (City of San Marcos 2013). Due to the location and the nature of the proposed project, there would be no impact on mineral resources.

5.9 Noise

Threshold of Significance: 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 are to excessive noise levels?

The proposed project is not located within the vicinity of a private airstrip. The public airport closest to the project site is the McClellan-Palomar Airport, located approximately 5 miles to the southwest.

According to the ALUCP for the McClellan-Palomar Airport, the project site is not located within the existing or future 60 dB CNEL noise contour of the airport (San Diego County Regional Airport Authority 2011). Therefore, people residing or working in the project area would not be exposed to substantial airport noise. No impact is identified for this issue area.

A discussion of additional noise significance thresholds is provided in Section 3.11, Noise.

5.10 Population and Housing

Threshold of Significance: Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.

There is no existing housing on the project site. Therefore, the project would not remove existing housing. The project proposes 119 multi-family units which would add to the housing stock in the city. Six of the units would be affordable at the very-low-income level (50% of the Area Median Income). No impact is identified for this issue area.

A discussion of additional population and housing significance thresholds is provided in Section 3.12, Population and Housing.

5.11 Wildfire

Threshold of Significance: A significant wildfire would be identified if the project was located in or near a state responsibility area or lands classified as very high fire hazard severity zone and would:

- **Substantially impair an adopted emergency response plan or emergency evacuation plan;**
- **Due to slope, prevailing wind, and other factors exacerbate wildlife risk, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire;**
- **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; or**
- **Expose people or structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes.**

The project site is located in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified a Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. No impact is identified for this issue area.

6.0 Other CEQA Considerations

6.1 Significant and Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines, Section 15126.2(b), requires that an Environmental Impact Report (EIR) describe any significant impacts that cannot be avoided, including those impacts that can be mitigated but not reduced to a less-than-significant level. Chapter 3, Environmental Analysis, of this EIR describes the potential environmental impacts of the proposed project and recommends mitigation measures to reduce impacts, where feasible. Based upon the analysis in Sections 3.1 through 3.17 of this EIR, the proposed project would not have any significant and unavoidable impacts. All impacts would be mitigated to below a level of significance through the incorporation of mitigation measures. These mitigation measures would be identified in a Mitigation Monitoring and Reporting program that will be adopted as part of the project and also be made a condition of approval of the project.

6.2 Growth Inducement

Section 15126.2(e) of the CEQA Guidelines mandates that the growth inducing nature of a proposed project be discussed. This CEQA Guideline states the growth-inducing analysis is intended to address the potential for the proposed project to "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Further, the CEQA Appendix G Checklist (Population and Housing) also mandates that a CEQA document speak to the proposed project's likelihood to induce substantial population growth in an area, either directly (e.g., by proposing new homes or businesses) or indirectly (e.g., through extension of roads or other infrastructure).

A project may be distinguished as either facilitating planned growth or inducing unplanned growth. Facilitating growth is related to the establishment of direct employment, population, or housing growth that would occur within a project site. Inducing growth is related to lowering or removing barriers to growth or by creating an amenity or facility that attracts new population/economic activity.

For purposes of this EIR analysis, a significant growth inducement impact would occur if the proposed project, and associated infrastructure improvements, directly or indirectly removes obstacles to growth such that the induced growth would significantly burden existing community services, the environment or cause a demand for General Plan Amendments. This section contains a discussion of the growth inducing factors related to the proposed project and as defined under CEQA Guidelines, Section 15126.2(e). A project is defined as growth inducing when it directly or indirectly:

- Fosters population growth;
- Includes the construction of additional housing in the surrounding environment;
- Removes obstacles to population growth;
- Taxes existing community service facilities, requiring construction of new facilities that could cause significant environmental effects; and/or
- Encourages or facilitates other activities that could significantly affect the environments, 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 discussed in Section 3.12, Population and Housing, the proposed project would directly induce growth through the development of 119 multi-family residential dwelling units on 2.51 acres, for a proposed density of 47 units per acre. Based on the city's population rate of 3.1 persons per dwelling unit, the proposed project would directly induce population growth to the area and would potentially add an estimated 369 people to the area. In addition, the proposed project would add 4,000 square feet (s.f.) of ground floor retail to the project site, which would provide employment opportunities. The proposed project would not, however, indirectly induce a growth in population as no extension of infrastructure is proposed beyond what is required to adequately serve the proposed project. The water and sewer improvements that may be required for the project, as detailed in Section 3.17, Utilities and Service Systems, would only be required to serve the project. Additionally, the majority of the surrounding area is developed. The SANDAG population growth forecasts rely, in part, on individual jurisdiction's planning documents, such as the City's General Plan. Because the project proposes a General Plan Amendment and Rezone, the estimated population of 369 people would not have been accounted for in SANDAG's projections. Therefore, the project's induced population would exceed these projections. However, determination of impacts related to population growth are based upon whether the induced growth would be considered substantial.

As discussed in Section 3.12, Population and Housing, the city's population is projected to grow from 94,258 people in 2016 to 104,365 people by 2035 (an increase of 10,107 people) (SANDAG 2022). The population increase of 369 people would account for 3.7% of SANDAG's projected population growth.

There is no hardline number or percentage available to determine whether or not this estimated introduction of 369 people (3.7% of projected growth) could be considered a substantial increase in population. However, SANDAG's 2050 Regional Growth Forecast is intended to be used as a starting point for regional planning as opposed to a prescribed growth pattern. Although the City determined that there are adequate sites available with appropriate designations/zoning to accommodate the remaining Regional Housing Needs Allocation (RHNA) for the current Housing Element planning period, the City has the discretion to adjust allocated housing units/sites as necessary to balance proposed plans for residential development with approved/constructed residential development (City of San Marcos 2021). Therefore, while the proposed project would directly induce growth beyond current estimates and forecasts, it would not be considered substantially growth inducing, and impacts would be **less than significant**.

6.3 Significant Irreversible Environmental Changes

CEQA Guidelines, Section 15126.2(d), requires that an EIR identify any significant irreversible environmental changes associated with the proposed project. Such changes include, for example, the intensification of land use or irreversible damage from environmental accidents associated with the proposed project.

The project proposes development of 119 multifamily residential apartments on 2.51 acres for proposed density of 47 dwelling units per acre. The project would include a total of 147 parking spaces, 34,582 square feet (s.f.) of common recreation area, and private open space ranging from 396 s.f. to 2,706 s.f. per unit. The project proposes a General Plan Amendment, Rezone, and Site Development Plan. The General Plan Amendment would change the existing Mixed Use 3 (MU3)

designation to Mixed Use 2 (MU2) and the rezone would be required to change the existing Mixed Use 3 (MU-3-SP) zoning to Mixed Use 2 (MU-2).

The proposed project's change in land use would not be an intensification of land use over the existing commercial designation. As analyzed in Chapter 4, Alternatives, of this EIR, commercial and office development under the existing land use and zoning designation would result in additional and more severe environmental impacts in comparison to the development under the proposed project designations. Nevertheless, as analyzed throughout Chapter 3 of this EIR, the proposed project may result in significant impacts to biological resources, cultural resources, tribal cultural resources, and geology and soils (see Tables 1-1 in Chapter 1, Executive Summary, of this EIR). All potential impacts identified for the proposed project would be mitigated to a less-than-significant levels.

Construction and/or operation of the proposed project would require the use of resources that include, but are not limited to, soils, gravel, concrete, and asphalt, lumber and other related forest products, petrochemical construction materials, steel, copper, and other metals, water, fuels, and energy. As such, the proposed project would result in the short-term and long-term use of fossil fuels and other nonrenewable resources.

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8.0 List of Preparers

City of San Marcos (Lead Agency)

Chris Garcia, Senior Planner
Kyrenne Chua, PE, MPA, Senior Civil Engineer
Jonathan Quezada, MPA, CFM, E.I.T., Assistant Engineer – Land Development

Environmental Impact Report

Sophia Mitchell & Associates, LLC

Sophia Habl Mitchell, LEED AP, Project Manager
Melyssa Sheeran, Senior Environmental Consultant

Air Quality, Energy, Greenhouse Gas, and Noise Reports

LDN Consulting

Jeremy Louden, Principal

Archeological Resources Inventory

Dudek

Keshia Montifolca, M.A., RPA

Biological Resources Report and Rare Plant Surveys

Dudek

Charles Adams, Botanist
Shana Carey, Biologist

Geotechnical Investigation

Advanced Geotechnical Solutions, Inc.

John J. Donovan, RCE, RGE
Paul J. DeRisi, CEG

Phase 1 Environmental Site Assessment

The Phase One Group

Mark E. Smith, Environmental Professional/President

Stormwater Quality Management Plan/Hydrology Report

Excel Engineering

Robert D. Dentino, RCE

Transportation Analysis

CR Associates

Jonathan Sanchez, PE, TE, PTOE
Joseph Perez, EIT

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