DRAFT

ENVIRONMENTAL IMPACT REPORT

LEGACY RANCH PROJECT

SAN JUAN CAPISTRANO, CALIFORNIA

July 2026

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LEGACY RANCH PROJECT

SAN JUAN CAPISTRANO, CALIFORNIA

Submitted to:

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Project No. 20252445

July 2026

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C: CALEEMOD
D: HRA
E: BRA
F: CRA
G: ENERGY CALCULATIONS
H: GEOTECHNICAL REPORT
I: PHASE I ESA REPORT
J: PHASE II ESA REPORT
K: PRELIMINARY DRAINAGE REPORT
L: PRELIMINARY WQMP
M: NOISE
N: TIA
O: FIRE BEHAVIOR REPORT

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LIST OF ABBREVIATIONS AND ACRONYMS

A	Agri-Business District
AB	Assembly Bill
ABC	California Department of Alcoholic Beverage Control
ACF	Assisted Care Facilities
ACM	asbestos-containing material
ACWM	asbestos containing waste material
ADT	average daily trips
af	acre-feet
afy	acre-feet per year
AGR	Agricultural Supply
amsl	above mean sea level
APN	Assessor's Parcel Number
APST	aboveground petroleum storage tank
AQMP	Air Quality Management Plan
AST	aboveground storage tank
AUL	activity and use limitations
Basin	South Coast Air Basin
BEP	Business Emergency Plan
BERD	Built Environment Resource Directory
bgs	below ground surface
BIOL	Preservation of Biological Habitats of Special Significance
BMP	Best Management Practice

BRA	Biological Resources Assessment
BTU	British Thermal Unit
CA MUTCD	California Manual on Uniform Traffic Control Devices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
California Register	California Register of Historical Resources
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CFU	colony forming unit
CGS	California Geological Survey
CH_4	methane
CHs	chlorinated herbicides
City	City of San Juan Capistrano
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COLD	Cold Freshwater Habitat
COMM	Commercial and Sport Fishing
CP	Community Park
CPUC	California Public Utilities Commission
CRA	Cultural Resources Assessment
CRC	California Residential Code
CREC	controlled recognized environmental condition
CRPR	California Rare Plant Rank
CSUF	California State University, Fullerton
CTR	California Toxics Rule or Commute Trip Reduction

CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CUSD	Capistrano Unified School District
CWA	Clean Water Act
CWC	California Water Code
DA	drainage area
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibels
dbh	trunk diameter at breast height
DCV	design capture value
DDE	Dichlorodiphenyldichloroethylene
DMA	drainage management area
DOC	Department of Conservation
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
du/ac	dwelling unit/acre
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMFAC	California Emissions Factor Model
EO	Executive Order
ERR	Environmental Radius Report
ESA	Environmental Site Assessment
ESRI	Environmental Systems Research Institute

EST	estuarine
ESU	Evolutionarily Significant Unit
F.I.N.D	Facility INformation Detail
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPT	Federally Proposed Threatened
FRA	Federal Responsibility Area
FRAP	Fire Resources Assessment Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GM	geometric mean
GOS	General Open Space
GPR	ground-penetrating radar
gpy	gallons per year
GSAs	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
GWh	gigawatt-hour
GWP	global warming potential
H_2S	hydrogen sulfide
HAs	hydrologic areas

HCD	California Department of Housing and Community Development
HFCs	hydrofluorocarbons
HI	Hazard Index
HMBP	Hazardous Materials Business Plan
HMD	Hazardous Materials Disclosure
HMP	Hydromodification Management Plan
HMSS	Orange County Fire Authority's Hazardous Materials Services Section
HR	Hillside Residential District
HRA	Health Risk Assessment
HREC	historical recognized environmental condition
HSA	hollow-stem auger or hydrologic subareas
HSC	California Health and Safety Code
HUs	hydrologic units
HVAC	heating, ventilation, and air conditioning
HW	hazardous waste
I-5	Interstate 5
ICC	International Code Council
IEPR	Integrated Energy Policy Report
IFC	International Fire Code
IHCL	Inventory of Historic and Cultural Landmarks
IND	Industrial Service Supply
IPaC	Information for Planning and Conservation
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study

ITE	Institute of Traffic Engineers
IWMP	Integrated Waste Management Plan
JBLTP	J.B. Latham Treatment Plant
JRMP	Jurisdictional Runoff Management Plan
KVA	kilovolt-amperes
kWh	kilowatt hours
LBP	lead-based paint
LCFS	low carbon fuel standard
LCI	Office of Land Use and Climate Innovation
LD	Low Density
L_{dn}	day-night average noise level
L_{eq}	equivalent continuous sound level
LID	Low Impact Development
L_{max}	maximum instantaneous noise level
LRA	Local Responsibility Area
LSTs	localized significance thresholds
MAR	marine
MBAS	Methylene Blue – Activated Substances
MBTA	Migratory Bird Treaty Act
MEI	maximally exposed individual
mg/L	milligrams per liter
mgd	million gallons per day
MHD	Medium High Density
MICR	maximum individual cancer risk

MLD	Medium Low Density or Most Likely Descendant
MMT	million metric tons
MNWD	Moulton Niguel Water District
mph	miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MT	metric tons
MTBE	Methyl-tert-butyl ether
MUN	Municipal and Domestic Supply
MW	megawatt
Mw	maximum earthquake magnitude
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
MWELO	Model Water Efficient Landscape Ordinance
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NALMA	North American Land Mammal Age
National Register	National Register of Historic Places
NAV	Navigation
NCCP/HCP	Natural Community Conservation Plan and Habitat Conservation Plan
NETR	Nationwide Environmental Title Research LLC
NFHL	National Flood Hazard Layer
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association

NGI	National Epidemiological and Environmental Assessment of Recreational Water gastrointestinal illness rate
NHMLAC	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NIMS	National Incident Management System
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NO_3	nitrate
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	National Park Service
NRHP	National Register of Historic Places
NTU	Nephelometric Turbidity Units
NWI	National Wetlands Inventory
NWOS	Northwest Open Space
O/RP	Office/Research Park
O3	Ozone
OCFCD	Orange County Flood Control District
OCHCA	Orange County Health Care Agency
OCPs	organo-chlorine pesticides
OCTA	Orange County Transportation Authority

OCTAM	Orange County Transportation Analysis Model
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Otra Mas	Otra Mas Horse Rescue and Equine Assisted Therapy
P&I	Public and Institutional District
PAs	participating agencies
Pb	lead
PCB	polychlorinated biphenyl
PFAS	Per- and Polyfluoroalkyl Substances
PFCs	Perfluorocarbons
pH	Hydrogen Ion Concentration
PID	photo-ionization detector
PM_{10}	particulate matter less than 10 microns in size
$PM_{2.5}$	particulate matter less than 2.5 microns in size
ppb	parts per billion
ppm	parts per million
ppt	parts per thousand
PPV	peak particle velocity
PRC	Public Resources Code
PRD	Permit Registration Document
PRIMP	Paleontological Resources Impact Mitigation Program
project/proposed project	Legacy Ranch Project
PV	photovoltaic

QA/QC	quality assurance and quality control
RCM	Regulatory Compliance Measure
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act of 1976
REC	recognized environmental condition
REC1	Water Contact Recreation
REC2	Non-contact Water Recreation
REL	reference exposure levels
RFP	Request for Proposals
RHNA	Regional Housing Needs Assessment
RMS	root-mean-square
ROCs	reactive organic compounds
ROGs	reactive organic gases
RS-10,000	Single-Family-10,000 District
RS-4,000	Single-Family-4,000 District
RTIP	Regional Transportation Improvement Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAL	saline
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	State Candidate Endangered

SCH	State Clearinghouse
SDG&E	San Diego Gas & Electric Company
SDWA	Safe Drinking Water Act
SE	State Endangered
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazard Mapping Act
SHMP	State Hazard Mitigation Plan
SHPOs	State Historic Preservation Officers
SIP	State Implementation Plan
SLF	Sacred Lands File
SMARTS	Stormwater Multiple Application and Report Tracking System
SMWD	Santa Margarita Water District
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SOCWA	South Orange County Wastewater Authority
SP	Specific Plan
SPS	Special Study
SR-74	Ortega Highway/State Route 74
SRA	Source Receptor Area or State Responsibility Area
SRRE	Source Reduction and Recycling Element
SSC	California Species of Special Concern
ST	State Threatened

State CEQA Guidelines	State of California *Guidelines for Implementation of the California Environmental Quality Act*
STV	Statistical Threshold Value
SVP	Society of Vertebrate Paleontology
Swanner House	Roger Y. Williams/Swanner House
SWIS	Solid Waste Information System
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
TAZ	Traffic Analysis Zone
TCP	Traditional Cultural Property
TCR	Tribal Cultural Resource
TDM	Transportation Demand Management
TDS	Total Dissolved Solids
TGD	Technical Guidance Document
TIA	Traffic Impact Analysis
TMDL	Total Maximum Daily Load
TPH	total petroleum hydrocarbons
tsf	thousand square feet
TWLTL	two-way-left-turn lane
UNFCCC	United Nations Framework Convention on Climate Change
urf	unit risk factor
USACE	United States Army Corps of Engineers

USC	United States Code
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
VHD	Very High Density
VLD	Very Low Density
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WARM	Warm Freshwater Habitat
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirement
WL	Watch List
WOTS	waters of the United States
WOTUS	waters of the State
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WUI	wildland-urban interface
ZEV	zero emission vehicle
ZNE	zero net energy

1.0 EXECUTIVE SUMMARY

This Draft Environmental Impact Report (EIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with implementation (i.e., construction and operation) of the proposed Legacy Ranch Project (proposed project or project) submitted by Almquist (the project Applicant). For purposes of CEQA, the City of San Juan Capistrano (City) is lead agency for the proposed project.

1.1 PROJECT UNDER REVIEW

The proposed project would develop the Legacy Ranch within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, California. The Legacy Ranch would consist of several different land uses arranged in seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core. Each core would incorporate community amenities, as described in more detail in Chapter 3.0, Project Description.

Changes to permitted uses currently identified in the NWOS Specific Plan would include the following:

- Adding religious gatherings and removing caretaker quarters to the list of permitted events/uses at the Swanner House.

In addition to the permitted uses currently identified in the NWOS Specific Plan, the following proposed uses would be added as permitted uses:

- Farming-related retail stands and educational tours; and
- Passive recreation amenities.

Changes to the conditionally permitted uses currently identified in the NWOS Specific Plan would include the following:

- Changing the current conditionally permitted use pertaining to wedding venues to include all events venues, in addition to the Swanner House and
- Changing the current conditionally permitted use to allow the sale and service of alcohol not involving the Swanner House.

In addition to the conditionally permitted uses currently identified in the NWOS Specific Plan, the following proposed conditionally permitted uses would be added as conditionally permitted uses:

- Eating and Drinking Establishments; and
- Group, social, public and private event activities with 499 or fewer participants so long as the use does not restrict public access to the public trails, dog park, and Putuidem Village. Events

may include ancillary services such as shuttle services, bus and trailer parking, food and beverage services, and amplified sound.

The following uses would be added as accessory uses to permitted or conditionally permitted uses:

- A maximum of four Caretakers Residences; and
- Offices.

In addition, the NWOS Specific Plan includes clarification that the allowed uses for the portion of the NWOS Specific Plan area owned by Orange County Flood Control District (OCFCD) shall be governed by its General Plan land use designation of Community Park (CP) and General Open Space (GOS).

The proposed project also includes an Amendment to the NWOS Specific Plan to allow for development of the Legacy Ranch on the project site. The amended NWOS Specific Plan would add the new land uses and activities identified above as permitted, conditionally permitted, and accessory uses of the NWOS Specific Plan.

In addition, the proposed project is pursuing a Conditional Use Permit (CUP) for the use of the project site as a venue for group activities and community events, such as organized gatherings with a shared purpose (e.g., recreational, educational, cultural, or social), occurring between 8:00 a.m. and 11:00 p.m. The CUP would also allow food and beverage services, including the service of alcoholic beverages in full compliance with all applicable permits and regulations of the California Department of Alcoholic Beverage Control (ABC) and the use of amplified sound equipment, provided it does not exceed the noise limits established in the City of San Juan Capistrano's Noise Ordinance. The CUP would permit a maximum of 499 combined on-site guests and participants at any one time, inclusive of individuals attending events at the Swanner House.

The proposed project would also amend the development standards of the NWOS Specific Plan, including reducing the required setback from the railroad track from 50 feet to 20 feet, removing the required internal setbacks from the Swanner House and Dr. Joe Cortese Dog Park, reducing the required setback from the existing trails from 25 feet to 5 feet, and changing the Trabuco Creek setback to be 100 feet from the conservation covenant boundary instead of the creek edge. In addition, the following structures would be permitted to be constructed within the required setbacks:

- Playgrounds;
- Public restrooms up to 1,500 square feet;
- Signage; and
- Shade structures with no more than 50 percent enclosed walls, 18 feet tall, and up to 500-square-foot setbacks may be located within the Specific Plan specified setbacks up to a reduced setback of 5 feet.

The proposed project also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The proposed project would also include a new 2,500 square foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village.

1.1.1 Access, Circulation, and Parking

Access to the proposed Legacy Ranch would be provided by three ingress/egress driveways from Camino Capistrano, including the existing access driveway south of the Swanner House and two proposed driveways that would provide access to the Community Building Core and entry road parking areas. Overall, the proposed project would provide a total of approximately 802 dedicated parking spaces throughout the proposed cores, including the 20 truck and trailer parking spaces within the proposed Equestrian Core. Additional temporary parking spaces could be provided by utilizing other areas throughout the project site. The precise location of temporary parking would be determined as part of logistical planning for each event, and could further include additional temporary parking off-site and the use of valet parking services.

The proposed project would also include a pedestrian bridge over Trabuco Creek that would connect the Community Building Core to the rest of the Legacy Ranch, internal decomposed granite roads, pedestrian paths, and new trail connections to the Trabuco Creek Trail throughout the project site.

1.1.2 Landscaping and Open Space

The proposed project would include active and passive recreational facilities and extensive open space. Some existing trees and vegetation on the project site would be maintained, and the proposed project would include new landscaping throughout the project site. If present on the project site, existing trees that meet the criteria for designation as a Heritage Tree[1] would be integrated into the landscape plan for the proposed project. In addition, the removal of any existing mature tree (i.e., a tree with a trunk diameter of six inches or more measured at three feet above grade) would require a Tree Removal Permit pursuant to Section 9-3.557 of the City's Municipal Code. Tree removal would meet the City's Tree Removal Permit requirements and conditions, including those related to the replacement of a mature tree.

In addition, the approximately 14-acre existing conservation covenant encompassing Trabuco Creek and both its banks would be untouched. Development of proposed structures would be set back from the covenant boundary by an approximately 100-foot buffer, consistent with the NWOS Specific Plan Development Standards. Although the proposed pedestrian bridge over Trabuco Creek itself would traverse the 100-foot buffer and the Trabuco Creek conservation covenant, the footings for the proposed bridge are planned to be located outside of the jurisdictional boundary of the creek area.

[1] In the City, a tree is considered a heritage tree when the tree has a trunk diameter at breast height (dbh) of 36 inches or greater, and is a specimen of one of the following species: *Schinus molle* (California pepper); *Quercus* spp. (oak); *Cedar* spp. (cedar); *Eucalyptus globulus* (blue gum eucalyptus); *Juglans* spp. (walnut); *Olea europaea* (olive); *Platanus* spp. (sycamore); or *Populus* spp. (cottonwood).

1.1.3 Utilities and Infrastructure

The project site is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunications infrastructure; however, it is expected that these utilities would need to be expanded and/or upgraded to accommodate the various land uses included in the proposed project.

Water service for the proposed project would be provided by Santa Margarita Water District (SMWD) via an existing water service line located in Camino Capistrano. Wastewater service would be provided by SMWD via an existing 8-inch sewer main that is connected to the Moulton Niguel Water District (MNWD) 12-inch trunk line located adjacent to the OCTA-owned rail line. Electricity and natural gas would continue to be supplied by San Diego Gas & Electric Company (SDG&E) and the Southern California Gas Company (SoCalGas), respectively, via extensions from existing electrical and natural gas transmission lines in the vicinity of the project site. Solar panels would be included in the design of the proposed equestrian arena in the Equestrian Core.

The northernmost well, located adjacent to the railroad tracks east of the agricultural core would be preserved. The existing access easement would also be preserved. The central well, located between the Equestrian Core and the Putuidem Village, would be integrated into the landscape plan as part of the proposed project. A future access easement would be incorporated into the circulation design for the proposed project in order to allow continued access to the northernmost well by the SMWD. The southernmost well, located in the Equestrian Core, would be abandoned and plugged as part of the proposed project.

Refer to Chapter 3.0, Project Description, for a complete description of the proposed project's location, context, and objectives, details of the proposed project itself, and a summary of required approvals and entitlements.

1.2 POTENTIAL AREAS OF CONTROVERSY

Pursuant to State CEQA Guidelines Section 15123, this Draft EIR acknowledges the areas of controversy and issues to be resolved that are known to the City or were raised during the scoping process. The City issued a Notice of Preparation (NOP) on November 13, 2025. The NOP was also filed with the Orange County Clerk-Recorder and published in the Capistrano Valley News, the City's newspaper of record, on November 13, 2025. In addition, the NOP was posted on the site and mailed to property owners of the properties located within 1,000 feet (approximately 166 property owners) of the project site.

The City also held a public scoping meeting on November 19, 2025, to solicit input from the public on topics to be analyzed in this Draft EIR. The material environmental issues and concerns raised in response to the NOP or at the scoping meeting include those related to aesthetics, biological resources, energy, hydrology and water quality, transportation, tribal cultural resources, and utilities and service systems.

Please note that this is not an exhaustive list of areas of controversy, but rather key issues that were raised during the scoping process. This Draft EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies

significant adverse environmental impacts, and proposes mitigation measures and/or alternatives designed to reduce or eliminate potentially significant impacts. **Appendix A** provides the NOP and the written comments received in response to the NOP, and **Appendix B** includes the Initial Study.

1.3 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. This summary provides an overview of the analysis contained in the Initial Study (**Appendix B**) and Chapter 4.0, Setting, Impacts, and Mitigation Measures, of this EIR.

As discussed in Chapter 2.0, Introduction, after the NOP and Initial Study were circulated for public and agency review and based on comments received from the public, the project applicant revised the proposed project to remove the Farm Stay Core and associated improvements, including the 70 "farm stay" units, farm stay center and amenities building, swimming pool, amphitheater stage, and other community building uses/spaces, and expand the Equestrian and Natural Cores. In addition, minor modifications to the approximately square footage of proposed improvements in the other proposed cores were made. This revised proposed project is described in Chapter 3,0, Project Description, and is analyzed in Chapter 4.0, of this Draft EIR. The revisions to the proposed project would not change the conclusions of the Initial Study as the removal of the Farm Stay Core represents an overall reduction in development and the overall intensity of proposed uses at the project site.

1.3.1 Findings of the Initial Study

The Initial Study for the proposed project is included in **Appendix B** to this Draft EIR. The Initial Study identified: (1) no impacts; (2) less than significant impacts; or (3) less than significant impacts with implementation of standard mitigation measures related to the following environmental issues:

- Agriculture and Forestry Resources
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Resources
- Recreation
- Wildfire

For a complete description of potential impacts identified in the Initial Study, please refer to the specific discussion within each topical section of the Initial Study (**Appendix B**). Chapter 6.0, Other CEQA Considerations, also includes a summary of the findings for each topic not discussed in the individual topical sections of this EIR.

The Initial Study identified potential impacts requiring more detailed evaluation related to the following environmental issues, which are further evaluated in Chapter 4.0 of this EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Transportation

- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Tribal Cultural Resources
- Utilities and Service Systems

1.3.2 Significant Impacts

Under CEQA, a significant impact on the environment is defined as "…a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." As discussed in more detail in Chapter 4.0 of this EIR, impacts in the following areas would be less than significant and would not require any mitigation:

- Aesthetics
- Air Quality
- Energy
- Greenhouse Gas Emissions

In addition, as discussed in Chapter 4.0, impacts in the following areas would be potentially significant without the implementation of mitigation measures, but would be reduced to a less than significant level if the mitigation measures recommended in this EIR are implemented:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Tribal Cultural Resources

1.3.3 Significant Unavoidable Impacts

The proposed project would result in a significant and unavoidable impact related to transportation and traffic.

- As discussed in Section 4.17, Transportation, of this Draft EIR, in the project base year (2025), the proposed project's total City vehicle miles traveled (VMT) of 1,602,833 would be higher than the City's VMT threshold of 1,600,754 and would result in a net increase in VMT of 2,079 (0.13 percent).The proposed project would implement specific design features and includes several VMT reduction measures from the California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA Handbook), which could reduce the proposed project's operational VMT to below the City's threshold, including the provision of end-of-trip bicycle facilities and the implementation of an employer-sponsored vanpool, as detailed in **Mitigation Measure TRA-1**. However, it cannot be guaranteed that the project's employees would use these provided facilities, and the use of these provided facilities cannot be monitored and enforced. Therefore, the VMT reduction provided by these measures may not be achieved and the proposed project would therefore result in a **significant and unavoidable** transportation impact related to VMT. As there are no additional feasible or enforceable mitigation measures that would reduce project VMT, operation of the proposed project would result in a result in a **significant and unavoidable** transportation impact related to VMT.

1.3.4 Cumulative Impacts

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts." Section 15130 of the *State CEQA Guidelines* requires that an EIR evaluate potential environmental impacts that are individually limited but cumulatively significant. These impacts can result from the proposed project when combined with other past, present, or reasonably foreseeable future projects. As described in Chapter 4.0 of this EIR, the cumulative impacts analysis in this EIR is based on information provided by the City on currently planned, approved, or proposed projects and regional projections for the area. All identified impacts of the proposed project would be individually limited and would not be cumulatively considerable. Therefore, a Statement of Overriding Considerations in accordance with Section 15093 of the *State CEQA Guidelines* is not required.

1.4 ALTERNATIVES

1.4.1 Alternatives Evaluated in this EIR

In accordance with CEQA and the *State CEQA Guidelines* (Section 15126.6), an EIR must describe a reasonable range of alternatives to the project, or to the project's location, that could attain most of the project's basic objectives while avoiding or substantially lessening any of the significantly adverse environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. CEQA states that an EIR should not consider alternatives "whose effect cannot be ascertained and whose implementation is remote and speculative" or which are infeasible.

The three alternatives to the proposed project discussed and analyzed in Chapter 5.0, Alternatives, of this EIR are:

- **No Project Alternative.** Under the No Project Alternative, the project site would not be developed with the Legacy Ranch, and no additional active or passive recreation uses would be constructed. The project site would remain as it is in its current condition, with no grading, demolition of the existing approximately 1,600 square-foot barn, or new construction occurring within the project site. The project site would continue to provide natural open space areas, passive recreational uses, and would continue to be developed with the historic Roger Y. Williams/Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, the Putuidem Village, barn and associated storage containers, and existing hiking/equestrian trails.

- **Reduced Intensity Alternative.** Under the Reduced Intensity Alternative, the overall intensity of the proposed project would be reduced. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced from 149 to 90. A reduction in the number of full-time boarding stalls associated with the proposed Equestrian Core would result in an overall reduction in the daily use of the site by people boarding horses, as well as a reduction in the size and intensity of rodeo events hosted at the project site. This would result in an overall decrease in the intensity of uses at the project site. All other aspects of the Equestrian Core would be the same as the proposed project. In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building

Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Therefore, the Reduced Intensity Alternative also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The Reduced Intensity Alternative would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village, similar to the proposed project.

- **Partial Residential Development Alternative (Market Rate Housing):** Under the Partial Residential Development Alternative (Market Rate Housing), the majority of the project site would be developed the same as the proposed project and would include the Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core. However, the approximately 4.6 acre Community Building Core would be developed with market rate housing at a density of 30 du/ac. Accordingly, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because the remainder of the project site would be developed consistent with the proposed project, the Partial Residential Development Alternative (Market Rate Housing) also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The Partial Residential Development Alternative (Market Rate Housing) would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village, similar to the proposed project.

1.5 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Information in **Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR,** summarizes the mitigation measures identified in this Draft EIR and has been organized to correspond with environmental issues discussed in Chapter 4.0. **Table 1.B: Applicable Regulatory Compliance Measures**, summarizes the regulatory compliance measures that would be applicable to the proposed project.

Table 1.A is arranged in four columns: (1) impacts; (2) level of significance without mitigation; (3) regulatory compliance measures and/or mitigation measures; and (4) level of significance with mitigation. Table 1.B is arranged in two columns: (1) environmental impact area and (2) regulatory compliance measures.

Levels of significance are categorized as follows:

LTS	Less Than Significant
PS	Potentially Significant
LTSM	Less Than Significant with Mitigation

For a complete description of potential impacts and recommended mitigation measures, please refer to the specific topical discussions in Chapter 4.0 of this EIR.

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.1 AESTHETICS			
There are no potentially significant impacts related to aesthetics.			
4.2 AIR QUALITY			
There are no potentially significant impacts related to air quality.			
4.3 BIOLOGICAL RESOURCES			
Implementation of the proposed project could have a substantial adverse effect, both directly and through habitat modifications, on special-status plant and wildlife species, including the following: • Thread-leaved brodiaea (*Brodiaea filifolia*) • CRPR 1B and 2B plant species • Crotch's bumble bee (*Bombus crotchii*) • Monarch butterfly (*Danaus plexippus plexippus* pop. 1) • Arroyo chub (*Gila Orcutt*) • Southern California steelhead (*Oncorhynchus mykiss*) • Pacific lamprey (*Entosphenus tridentatus*) • Southwestern pond turtle (*Actinemys pallida*) • Coastal California gnatcatcher (*Polioptila californica californica*) • Least Bell's vireo (*Vireo bellii pusillus*) • Southwestern willow flycatcher (*Empidonax traillii extimus*) • Burrowing owl (*Athene cunicularia*) • Cooper's hawk (*Astur cooperii*) • white-tailed kite (*Elanus leucurus*) • long-eared owl (*Asio otus*) • Loggerhead shrike (*Lanius ludovicianus*) • California horned lark (*Eremophila alpestris actia*) • Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) • Yellow-breasted chat (*Icteria virens*) • Yellow warbler (*Setophaga petechia*) • Mountain lion (*Puma concolor*) • Pallid bat (*Antrozous pallidus*) • Western red bat (*Lasiurus blossevillii*) • Western mastiff bat (*Eumops perotis californicus*) • Pocketed free-tailed bat (*Nyctinomops femorosaccus*) • Big free-tailed bat (*Nyctinomops macrotis*)	PS	**Mitigation Measure BIO-1: Special-Status Plant Species.** Prior to the initiation of vegetation clearing or other construction activities, a focused survey shall be conducted at the appropriate peak flowering season of the target special-status plant species. If special-status species are observed within the project site, the impact shall be evaluated based on the size and status of the species observed. If no special-status plant species are observed, then no further mitigation shall be required. <u>California Rare Plant Ranks (CRPR) 1B and 2B Species.</u> If any CRPR 1B or 2B species are present, impacts would be considered potentially significant and mitigation would be required to address potential impacts and reduce them to less than significant. If no known individuals of the species would be impacted, then no further mitigation would be required. The project Applicant shall consider whether the design could be revised to avoid or minimize impacts on the species location(s). If the species cannot be avoided, then the project Applicant shall coordinate with Development Services Director of the City of San Juan Capistrano (City), or their designee, to determine the mitigation strategy. The mitigation strategy may include: (1) on-site preservation or enhancement; (2) purchase of credits from an approved mitigation bank; (3) translocation of this species to an off-site mitigation site. If translocation is selected, the project Applicant shall prepare a Rare Plant Mitigation Plan for review and approval by the USFWS and CDFW. The Rare Plant Mitigation Plan shall include the following: • Responsibilities of the parties implementing the plan • Performance criteria • Mitigation site selection • Methodology for collecting seed and translocating corms (including storage) • Site preparation and installation methodology • Maintenance and monitoring schedule • Contingency plan • Long-term site protection **Mitigation Measure BIO-2: Crotch's Bumble Bee.** Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist with expertise in surveying for native bumble bees. The qualified biologist shall conduct a focused survey for Crotch's bumble bee in accordance with the most recent CDFW guidelines (CDFW 2023). The focused survey shall consist of three site visits during the colony active period (April through August). If Crotch's bumble bee is observed, the project Applicant shall obtain an Incidental Take Permit from CDFW prior to removal of habitat for this species. The project Applicant shall consult with CDFW to determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation,	LTSM

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following: • Responsibilities of the parties implementing the plan • Performance criteria • Mitigation site selection • Seed mix and planting palette • Site preparation and installation methodology • Maintenance and monitoring schedule • Contingency plan • Long-term site protection If no Crotch's bumble bees are observed, the project Applicant will not need to obtain an Incidental Take Permit, and no compensatory mitigation will be required. **Mitigation Measure BIO-3: Crotch's Bumble Bee Biological Monitoring.** Regardless of the results of the focused survey conducted for **Mitigation Measure BIO-2,** CDFW survey guidelines require biological monitoring during vegetation removal. A qualified biological monitor shall be present during the clearing of vegetation when Crotch's bumble bees are active (i.e., February 1 through October 31). The biological monitor shall confirm that the project limits are clearly marked and that vegetation removal and construction staging occur only within the project limits. No biological monitoring would be needed from November 1 through January 31. If Crotch's bumble bee is observed during the biological monitoring, the project Applicant shall contact CDFW, and an Incidental Take Permit shall be obtained as described above under **Mitigation Measure BIO-2**. **Mitigation Measure BIO-4: Overwintering Monarch Butterflies.** Prior to the removal of any mature trees during the monarch overwintering season (October 1-March 31), the project Applicant shall retain a qualified biologist to survey the tree(s) to be removed, as well as any trees located within 100 feet, for presence of overwintering monarch butterflies. The survey shall be conducted during the overwintering season, during appropriate conditions. Surveys must be conducted before 10:00 a.m., at a temperature not to exceed 55 degrees Fahrenheit, with no rain or strong winds. If overwintering monarchs are observed within the project site, the host tree(s) shall be protected for the duration of the overwintering season. To prevent any impacts to the microclimate of the roost, a protective buffer of at least 100 feet shall be implemented, within which mature trees shall not be removed during the overwintering season. **Mitigation Measure BIO-5: Water Quality.** Grading and construction resulting in ground disturbance should occur within the typical dry season (April 15 through October 15), as feasible, to avoid erosion and sedimentation impacts to nearby creeks and water quality. The Director of the City of San Juan Capistrano Development Services Department, or designee, shall verify that project plans require the Construction Contractor to install adequate erosion and sedimentation barriers (e.g., silt fencing) prior to ground disturbance to prevent any sediment-laden runoff or debris from entering on-site waterways during the wet season or periods of rain.	

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		This silt fencing will also serve as a temporary barrier to wildlife entering work areas during construction. The barriers shall consist of 3-foot-tall silt fencing buried to a depth of at least 6 inches below the soil surface along the outer limits of all work areas (or as otherwise required by the storm water pollution and prevention plan). These barriers shall be inspected daily by construction personnel and maintained and repaired as necessary for the duration of construction to ensure that they are functional and are not a hazard to wildlife on the outer side of the fence. All barriers shall be removed following completion of construction **Mitigation Measure BIO-6: Southwestern Pond Turtle.** Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist to conduct a focused survey for southwestern pond turtle in accordance with the most recent guidelines (USGS 2006). The focused survey shall consist of multiple site visits during the active period (April through August). If southwestern pond turtle is observed, the project Applicant shall conduct a Section 7 Conference with the USFWS and shall also consult with the CDFW associated with jurisdictional permitting described under **Mitigation Measure BIO-8.** The project Applicant shall consult with the USFWS/CDFW to determine the appropriate avoidance and minimization measures (e.g., pre-construction surveys, biological monitoring, exclusion fencing) to avoid direct mortality of this species. The consultation shall also determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following: • Responsibilities of the parties implementing the plan • Performance criteria • Mitigation site selection • Seed mix and planting palette • Site preparation and installation methodology • Maintenance and monitoring schedule • Contingency plan • Long-term site protection If no southwestern pond turtles are observed, the project Applicant will not need to consult with the USFWS/CDFW, and no compensatory mitigation will be required. **Mitigation Measure BIO-7: Coastal Sage Scrub/Coastal California Gnatcatcher Habitat.** Prior to issuance of a grading permit, the project Applicant shall consult with the USFWS to obtain a Biological Opinion/Incidental Take Permit for the loss of coastal sage scrub habitat occupied by coastal California gnatcatcher. The consultation shall determine the appropriate compensatory mitigation for the loss of coastal sage scrub and other habitat within the Existing Use area; impacts on Critical Habitat; and impacts on the existing conservation easement. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., one acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or	

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at an approved mitigation bank; or a combination of these approaches, as approved by USFWS. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following: • Responsibilities of the parties implementing the plan • Performance criteria • Mitigation site selection • Seed mix and planting palette • Site preparation and installation methodology • Maintenance and monitoring schedule • Contingency plan • Long-term site protection **Mitigation Measure BIO-8: Standard Avoidance and Minimization Measures for Coastal California Gnatcatcher.** During vegetation clearing, the NCCP/HCP requires the following construction-related minimization mitigation measures: a. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers shall occur during the breeding season (i.e., February 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures," are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures, and emergency facility repairs. In the event of such public health and safety circumstances, the project Applicant shall provide USFWS/CDFW with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens, and any other coastal sage scrub Covered Species that are not otherwise flushed and shall carry out the following measures only to the extent as practicable in the context of the public health and safety considerations. b. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub, a survey shall be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans. c. A monitoring biologist, acceptable to USFWS/CDFW shall be onsite during any clearing of coastal sage scrub. The project Applicant shall advise USFWS/CDFW at least 7 calendar days prior to the clearing of any habitat occupied by Covered Species to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing capture activities. The monitoring biologist shall flush Covered Species (avian or other mobile Covered Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they shall be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It shall be the responsibility of the monitoring biologist to assure that Covered Bird Species shall not be directly impacted by brush-clearing and	

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		earth-moving equipment in a manner that also allows for construction activities on a timely basis. d. Following the completion of initial grading/earth movement activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel shall be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment shall be permitted within such marked areas. e. In areas bordering the NCCP Reserve System containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations shall be restricted to a minimum number during construction consistent with Project construction requirements. Waste dirt or rubble shall not be deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operators shall be conducted and documented to ensure maximum practicable adherence to these measures. f. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist. **Mitigation Measure BIO-9: Riparian Habitat/Jurisdictional Permitting.** Prior to issuance of a grading permit, the project Applicant shall obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and Tributary 1, including a Section 1602 Streambed Alteration Agreement from CDFW. The project Applicant shall consult with each agency to determine the appropriate compensatory mitigation for the loss of jurisdictional resources and impacts on the existing conservation easement. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of jurisdiction impacted). The mitigation strategy may include preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at an approved mitigation bank; or a combination of these approaches, as approved by the permitting agency. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following: • Responsibilities of the parties implementing the plan • Performance criteria • Mitigation site selection • Seed mix and planting palette • Site preparation and installation methodology • Maintenance and monitoring schedule • Contingency plan • Long-term site protection **Mitigation Measure BIO-10: Focused Riparian Birds Survey.** Prior to commencing construction activities, the project Applicant shall retain a qualified biologist to conduct a protocol focused survey for least Bell's vireo and southwestern willow flycatcher. The surveys shall be conducted in accordance with the latest USFWS survey protocol for each species. Focused surveys for least Bell's vireo shall occur between April 10 and July 31 (USFWS 2001). Focused surveys for southwestern willow flycatcher shall occur between May 15 and July 17 (USFWS 2010).	

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		If least Bell's vireo and/or southwestern willow flycatcher are observed on or adjacent to the project site, the project Applicant shall consult with the USFWS and CDFW to obtain a Biological Opinion/Incidental Take Permit. The consultation shall also determine the appropriate compensatory mitigation for the loss of riparian habitat and appropriate avoidance and minimization measures for these species. Avoidance and minimization measures may include, but would not be limited to, restriction on removal of riparian vegetation during the breeding season (March 15 to September 15), pre-construction surveys (if work occurs within 500 feet of Trabuco Creek during the breeding season), protective buffers (if an active nest is observed), biological monitoring, and/or noise monitoring/noise abatement measures (if needed). These measures shall be incorporated into the regulatory permits described above under **Mitigation Measure BIO-9**. If neither least Bell's vireo nor southwestern willow flycatchers are observed, the project Applicant will not need to obtain a Biological Opinion/Incidental Take Permit for these species. However, jurisdictional permitting described under **Mitigation Measure BIO-9** would still be required. **Mitigation Measure BIO-11: Burrowing Owl.** Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist to conduct a focused survey for burrowing owl in accordance with the most recent guidelines (CDFW 2012). The focused survey shall consist of multiple site visits during the breeding season (February 1 to August 31). If burrowing is observed, the project Applicant shall consult with the CDFW to obtain an Incidental Take Permit. The consultation shall determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following: • Responsibilities of the parties implementing the plan • Performance criteria • Mitigation site selection • Seed mix and planting palette • Site preparation and installation methodology • Maintenance and monitoring schedule • Contingency plan • Long-term site protection. If no burrowing owls are observed, the project Applicant will not need to consult with the CDFW and no compensatory mitigation will be required. **Mitigation Measure BIO-12**: **Pre-construction Burrowing Owl Survey.** Prior to the start of construction, the project Applicant shall retain a qualified biologist to conduct two burrowing owl take avoidance surveys. The first survey shall be conducted at least 14 days prior to any site	

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Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		disturbance (grubbing, grading, and construction) and the second shall be conducted within 24 hours of disturbance in accordance with CDFW (2012) guidelines. If no burrowing owls are observed during the take avoidance surveys, no further measures would be required. If a burrowing owl or occupied burrow (as indicated by recent burrowing owl sign) is observed, a protective buffer shall be established around the burrow in accordance with CDFW (2012) guidance. The biologist shall stake and flag the protective buffer, and no construction activities shall be allowed within the protective buffer during the breeding season (February 1 through August 31), or until a qualified biologist determines that the burrow is no longer active. If the burrow is within the project disturbance area, the project Applicant shall consult with CDFW to coordinate relocation of the owl outside of the breeding season (September 1 through January 31) in accordance with accepted protocols. The appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the CDFW. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the CDFW. **Mitigation Measure BIO-13: Nesting Birds/Raptors.** To the extent feasible, the project Applicant shall plan for the initiation of construction activities and vegetation removal to occur outside the nesting bird season (February 1 to September 15). If vegetation removal, construction, or grading activities are planned to take place within the active nesting bird season (February 1 through September 15), the project Applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey no more than 3 days prior to the start of such activities. The nesting bird survey shall include the project site and areas within 300 feet of the project site. The qualified biologist shall document the results of the survey in a brief memorandum describing the methods and results of the survey, and describing any protective measures or required follow-up monitoring. If any active bird nests are found on the project site or within 300 feet of the project site, the qualified biologist shall establish a protective buffer zone around each active nest. The qualified biologist shall determine the size of the protective buffer based on species, the nest location with respect to construction activities, and the nature of the proposed construction activities. In general, the protective buffer shall be a minimum of 50 feet for passerines and 300 feet for raptors. The biologist shall stake and flag the protective buffer, and no construction activities shall be allowed within the protective buffer during the breeding season (February 1 through August 31), or until a qualified biologist determines that the nest is no longer active. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, the protective buffer can be removed and construction activities can proceed within this area. **Mitigation Measure BIO-14**: **Night Lighting During Construction.** During construction activities, if night work (i.e., between dusk and dawn) is anticipated, night lighting shall be used only in areas of active work and shall be focused on the direct area(s) of work and away from areas of open space, including areas that provide for wildlife movement and potential bat roosts. If night work is needed, the project Applicant shall retain a qualified biologist to conduct a Worker's Environmental Awareness Program training for the night crew to educate them on the sensitive resources present surrounding the project site that could be affected by night lighting.	

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Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		Mitigation Measure BIO-15: Night Lighting of the Project. Prior to the issuance of a grading permit, the City's Development Services Director, or their designee, shall review the lighting plans for the project to confirm that night lighting is focused on the developed areas and away from Trabuco Creek and areas of open space, including areas that provide for wildlife movement and potential bat roosts. **Mitigation Measure BIO-16: Roosting Bats.** Within 30 days prior to the initiation of construction activities, the project Applicant shall retain a qualified bat biologist to survey all suitable structures (e.g., barn, bridges) and trees/vegetation within the project site for bat roosts. If bat roosts are found within the project site, the qualified bat biologist shall conduct a nighttime emergence survey to identify the bats to the species level to determine if they are common or special-status species. The bat biologist shall prepare a memorandum describing the methodology for tree trimming and removal that would avoid or minimize impacts on bat roosts by excluding bats or timing the disturbance to allow them to safely escape. **Mitigation Measure BIO-17: Tree Trimming and Removal of Trees Used by Roosting Bats.** To the extent feasible, the project Applicant shall plan for the initiation of construction activities, tree trimming, and vegetation removal to occur outside the bat maternity season (April 1 to August 31) to avoid direct impacts to non-volant (flightless) young that may roost in oak trees. If trimming or removal of trees during the bat maternity season cannot be avoided, the project Applicant shall retain a qualified bat biologist to conduct a pre-construction survey for roosting bats as described in **Mitigation Measure BIO-16**. The project Applicant shall retain a qualified bat biologist to monitor tree trimming and tree removal activities. This can include supervising the two-step tree removal method and checking downed limbs for bats. **Mitigation Measure HYD-1: Equestrian-Related Water Quality Best Management Practices (BMPs).** (Refer to 4.9, Hydrology and Water Quality)	
Implementation of the proposed project would impact 0.20 acre of special-status riparian communities, including 0.03 acre of sycamore riparian woodland and 0.17 acre of coast live oak riparian forest, and would result in the loss of 0.13 acre of Mexican elderberry woodland, which is considered a sensitive vegetation community by the CDFW.	PS	**Mitigation Measure BIO-8: Riparian Habitat/Jurisdictional Permitting.** (Refer to above)	LTSM
Implementation of the proposed project would impact a total of 0.041 acre of waters under the jurisdiction of the USACE; a total of 0.041 acre of waters under the jurisdiction of the RWQCB; and a total of 0.196 acre of streambed under the jurisdiction of the CDFW.	PS	**Mitigation Measure BIO-9: Riparian Habitat/Jurisdictional Permitting.** (Refer to above)	LTSM
Noise, vibration, night lighting, and dust from construction activity and/or noise and night lighting associated with project operation could deter wildlife activity along Trabuco Creek, making it less suitable for wildlife movement and temporarily altering migration behaviors, territories, or foraging habitats in select areas. In addition, construction of the proposed project could impact bat maternity roosts and active bird nests, if present on the project site.		**Mitigation Measure BIO-7: Coastal Sage Scrub/Coastal California Gnatcatcher Habitat.** (Refer to above) **Mitigation Measure BIO-8: Standard Avoidance and Minimization Measures for Coastal California Gnatcatcher.** (Refer to above) **Mitigation Measure BIO-10: Focused Riparian Birds Survey.** (Refer to above) **Mitigation Measure BIO-11: Burrowing Owl.** (Refer to above) **Mitigation Measure BIO-12: Pre-construction Burrowing Owl Survey.** (Refer to above) **Mitigation Measure BIO-13: Nesting Birds/Raptors.** (Refer to above) **Mitigation Measure BIO-14: Night Lighting During Construction.** (Refer to above)	LTSM

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		Mitigation Measure BIO-15: Night Lighting of the Project. (Refer to above) **Mitigation Measure BIO-16: Roosting Bats.** (Refer to above) **Mitigation Measure BIO-17: Tree Trimming and Removal of Trees Used by Roosting Bats.** (Refer to above)	
Implementation of the proposed project could include the removal of onsite trees, some of which may be heritage trees. The removal of heritage trees could conflict with the City's Municipal Code. In addition, construction of footings for the proposed bridge structures over Trabuco Creek and Tributary 1 would result in minor impacts to areas within the existing conservation easement along Trabuco Creek that was established as mitigation for a previous project.	PS	**Mitigation Measure BIO-7: Coastal Sage Scrub/Coastal California Gnatcatcher Habitat.** (Refer to above) **Mitigation Measure BIO-9: Riparian Habitat/Jurisdictional Permitting.** (Refer to above) **Mitigation Measure BIO-17: Tree Trimming and Removal of Trees Used by Roosting Bats.** (Refer to above)	LTSM
Implementation of the proposed project would impact 3.69 acres of Existing Use areas under the NCCP/HCP, which is not covered under the Orange County Central-Coastal NCCP/HCP.	PS	**Mitigation Measure BIO-7: Coastal Sage Scrub/Coastal California Gnatcatcher Habitat.** (Refer to above) **Mitigation Measure BIO-8: Standard Avoidance and Minimization Measures for Coastal California Gnatcatcher.** (Refer to above)	LTSM
4.4 CULTURAL RESOURCES			
Ground disturbing activities during construction, including grading and excavation, could unearth previously unknown archaeological deposits or resources, resulting in a potential substantial adverse change in the significance of a unique archaeological resource, as defined in *State CEQA Guidelines* Section 15064.5.	PS	**Mitigation Measure TCR-1: Native American Monitoring of Ground Disturbing Activities.** (Refer to 4.12, Tribal Cultural Resources) **Mitigation Measure TCR-2: Repatriation and Reburial of Tribal Cultural Resources.** (Refer to 4.12, Tribal Cultural Resources)	LTSM
Ground disturbing activities during construction, including grading and excavation, has the potential to unearth previously unknown human remains.	PS	**Mitigation Measure TCR-1: Native American Monitoring of Ground Disturbing Activities.** (Refer to 4.12, Tribal Cultural Resources) **Mitigation Measure TCR-2: Repatriation and Reburial of Tribal Cultural Resources.** (Refer to 4.12, Tribal Cultural Resources)	LTSM
4.5 ENERGY			
There are no significant impacts related to energy.			
4.6 GEOLOGY AND SOILS			
Implementation of the proposed project could result in substantial soils erosion or the loss of topsoil during project operation.	PS	**Mitigation Measure HYD-1: Equestrian-Related Water Quality Best Management Practices (BMPs).** (Refer to 4.9, Hydrology and Water Quality)	LTSM
Excavation during project construction into the Young Axial Channel Deposits below a depth of 10 feet would impact sediments with high paleontological sensitivity and could result in impacts to undiscovered paleontological resources.	PS	**Mitigation Measure PAL-1:** A paleontologist, listed on the 2025 Orange County Certified Paleontologist list, shall be retained by the applicant to develop a Paleontological Resources Impact Mitigation Program (PRIMP) for this project. The PRIMP shall reviewed by the Development Services Director and approved as being consistent with the guidelines of the Society of Vertebrate Paleontology and shall include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading. **Mitigation Measure PAL-2:** Excavation and grading activities in deposits with high paleontological sensitivity (i.e., Young Axial Channel Deposits below a depth of 10 feet) shall be monitored by a paleontological monitor, listed on the 2025 Orange County Certified Paleontologist list, following a PRIMP. No monitoring is required for excavations in deposits with no or low paleontological sensitivity (i.e., Artificial Fill or Young Axial Channel Deposit above a depth of 10 feet). If	LTSM

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		paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and a paleontologist should be contacted to assess the find for significance. If determined to be significant, the fossil shall be collected from the field. Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. At the conclusion of the monitoring program, a report of findings shall be prepared to document the results of the monitoring program. This report shall be submitted to the City and the designated museum repository for final review and record-keeping.	
4.7 GREENHOUSE GAS EMISSIONS			
Implementation of the proposed project would exceed the City's VMT threshold and would result in approximately 3,298.5 MT CO_2e/yr, which would exceed the SCAQMD threshold of 3,000 MT CO_2e/yr, which would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	PS	**Mitigation Measure TRA-1:** Transportation Demand Management. (Refer to 4.11, Transportation)	LTSM
4.8 HAZARDS AND HAZARDOUS MATERIALS			
The Phase I Environmental Site Assessment (ESA) identified three recognized environmental conditions (RECs) and three environmental issues associated with the project site, which could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions.	PS	**Mitigation Measure HAZ-1: Phase I Environmental Site Assessment Recommendations.** Prior to issuances of any grading or building permit, the project Applicant shall demonstrate to the satisfaction of the City of San Juan Capistrano Development Services Department that the recommendations detailed in the Phase I Environmental Site Assessment (ESA) have been implemented as part of the proposed project. Recommendations detailed in the Phase I ESA include the following: • A Phase II Environmental Site Assessment shall be performed in order to assess the potential for residual contamination to be present in the area of the former underground storage tanks (USTs) at the project site. The Phase II ESA shall also include a ground-penetrating radar (GPR) survey in order to confirm that all USTs and other subsurface structures associated with the former USTs have been removed. (Completed September 17, 2025) • Shallow soils near the former herbicide aboveground storage tank (AST) and the orchard areas at the project site shall be sampled to confirm or deny the presence of hazardous substances associated with the former agricultural operations. If hazardous substances associated with the former agricultural operations are confirmed to be present at the site, the contaminated soil shall be removed and disposed of in accordance with all applicable federal, State, and local regulations. (Completed September 17, 2025) • The 55-gallon steel drum containing unknown material located in the eastern portion of the project site shall be removed and disposed of in accordance with all applicable federal, State, and local regulations. (Completed July 7, 2025). • An asbestos survey of the structures that would be demolished shall be performed and any identified asbestos-containing materials (ACMs) shall be abated by a licensed abatement contractor according to all applicable federal, State, and local regulations prior to conducting any proposed renovation or demolition activities.	LTSM

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

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		• All painted surfaces at the project site shall be assumed to contain lead-based paints (LBPs) and treated as such unless future testing is conducted proving otherwise. All federal, State, and local regulations pertaining to LBPs shall be followed by any renovation or demolition contractors as appropriate. • The delaminated concrete debris containing paint which was observed on the unpaved surfaces of the project site near the concrete pillars of the railroad bridge shall be removed and disposed of in accordance with all applicable federal, State, and local regulations in order to minimize potential LBPs impacts to the on-site soils.	
4.9 HYDROLOGY AND WATER QUALITY			
Horse waste, such as manure, urine and soiled bedding, associated with the proposed Equestrian Core and equine activities could adversely affect water quality if transported to downstream receiving water bodies via stormwater runoff.	PS	**Mitigation Measure HYD-1: Equestrian-Related Water Quality Best Management Practices (BMPs).** To protect surface water and stormwater quality and to minimize the potential for pollutant discharges associated with equestrian activities, the Applicant shall implement and maintain Horse Care Best Management Practices (BMPs) consistent with guidance from the Orange County Public Works Department. BMPs shall include, but are not limited to, the following: **1. Grooming and Washing** ○ Horses shall be washed only in areas that drain to the sanitary sewer, a vegetated area, or over gravel surfaces designed to prevent runoff to storm drains or waterbodies. ○ Water use during washing shall be minimized through the use of spray nozzles with automatic shutoff valves, and water shall be turned off when not actively in use. ○ Wash areas shall be elevated or otherwise designed to prevent runoff from contacting surrounding ground surfaces. ○ All horse care products shall be used in accordance with manufacturer instructions, and chemical spills shall be cleaned immediately to prevent entry into the storm drain system. **2. Manure Collection, Storage, and Disposal** ○ Horse manure shall be swept or shoveled daily from holding areas rather than washed down. ○ Manure storage areas shall be located away from storm drains and waterbodies, sloped away from drainage pathways, and enclosed or covered to prevent runoff during rainfall. ○ Manure and soiled bedding shall be composted or properly disposed of through licensed waste haulers or transported to approved composting or recycling facilities. **3. Buffer Areas and Facility Design** ○ Vegetated buffer strips shall be installed and maintained between corrals, paddocks, manure storage areas, and nearby waterways. ○ Any new or reconstructed equestrian facilities shall be designed in accordance with applicable County facility design standards to minimize runoff and pollutant discharges.	LTSM

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		These BMPs shall be implemented prior to initiation of equestrian operations and shall be maintained for the life of the project. Consistent with Sections 8-14.109 and 8-14.110 of the City's Municipal Code, these BMPs would be subject to City inspection and enforcement to ensure long-term compliance.	
Implementation of the proposed project could result in substantial erosion and/or siltation on or- off-site during project operation.	PS	**Mitigation Measure HYD-1: Equestrian-Related Water Quality Best Management Practices (BMPs).** (Refer to above)	LTSM
Operation of the proposed Equestrian Core and associated equine activities provide substantial additional sources of polluted runoff.	PS	**Mitigation Measure HYD-1: Equestrian-Related Water Quality Best Management Practices (BMPs).** (Refer to above)	LTSM
Potential water quality impacts associated with the proposed Equestrian Core and associated equine activities would conflict with implementation of a water quality control plan.	PS	**Mitigation Measure HYD-1: Equestrian-Related Water Quality Best Management Practices (BMPs).** (Refer to above)	LTSM
4.10 NOISE			
Operational noise associated with HVAC equipment and outdoor events with amplified sound could exceed the City's exterior noise standards.	PS	**Mitigation Measure NOI-1: Heating, Ventilation, and Air Conditioning (HVAC) Equipment Operations.** Prior to the issuance of building permits and when the HVAC locations, number of units, and specifications for each building are available, an acoustical study shall be prepared by a qualified acoustical consultant and submitted to the City for review and approval to confirm compliance with the City's exterior noise standards shown in Table 4.10.H. If it is discovered that noise levels exceed the City's exterior noise standards, additional measures shall be recommended by a qualified acoustical consultant that may include, but not be limited to location of the equipment on the project, additional shielding (screening or soundwalls), or using equipment that has a quieter rating. **Mitigation Measure NOI-2: Operations Compliance Inspection and Monitoring.** A qualified acoustical consultant shall prepare an acoustical study consisting of noise monitoring during three (3) peak activity weekends once the project is in operation to confirm compliance with the City's exterior noise standards shown in Table 4.10.H. If the project is phased, additional acoustical studies may be required. Also, if it is discovered that noise levels exceed the City's exterior noise standards, additional measures shall be recommended by a qualified acoustical consultant that may include, but not be limited to, the use of highly directional speakers, speaker noise level restrictions, event restrictions, or additional noise barriers.	LTSM
4.11 TRANSPORTATION			
Vehicle Miles Traveled (VMT) associated with implementation of the proposed project would exceed the City's VMT threshold, which would conflict with a program, plan, ordinance or policy addressing the circulation system, including the City's General Plan and City Administrative Policy No. 310.	PS	**Mitigation Measure TRA-1: Transportation Demand Management.** Prior to the issuance of building permits, the project Applicant shall submit a Transportation Demand Management (TDM) Plan to the City of San Juan Capistrano City Engineer for review and approval. The TDM Plan shall include Vehicle Miles Traveled (VMT) traffic reduction measures, consistent with the California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA Handbook), that shall be implemented in order to reduce project-generated VMT to below the City's VMT threshold. The VMT reduction measures contained in the TDM Plan shall include the following, which may reduce the project's total VMT by 7.71 percent: • **Provide End-of-Trip Bicycle Facilities.** The project Applicant shall install and maintain end-of-trip bicycle facilities (e.g., bicycle parking, bike lockers, showers, and personal lockers) to encourage commuting by bicycle, thereby reducing VMT and GHG emissions. CAPCOA Handbook measure "T-10. Provide End-of-Trip Bicycle Facilities" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the TIA prepared for the project, this measure may reduce the project's VMT by 0.07 percent.	LTSM

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		• **Provide Employer-Sponsored Vanpool.** The project Applicant shall implement an employer-sponsored vanpool service. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting. This measure would shift from long-distance, single-occupied vehicles to shared vehicles, reducing overall commute VMT and reducing GHG emissions. CAPCOA Handbook measure "T-11. Provide Employer-Sponsored Vanpool" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the TIA prepared for the project, this measure may reduce the project's VMT by 7.65 percent. In addition, the following additional VMT reduction measures included in the CAPCOA Handbook can be implemented: • **Provide Pedestrian Network Improvement.** The project Applicant can install new pedestrian paths/sidewalks on Camino Capistrano along the entire length of the project frontage, which results in approximately 0.61 mile of new sidewalk/pedestrian access. The integration of sidewalks and pedestrian paths that would connect the proposed project to the external pedestrian network around the project site would allow for connection with the surrounding community and easy access without vehicular dependency, thereby enhancing the City's active transportation network. CAPCOA Handbook measure "T-18. Provide Pedestrian Network Improvement" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the Traffic Impact Analysis (TIA) prepared for the project, this measure may reduce the project's VMT by 0.19 percent. • **Implement Commute Trip Reduction Program (Voluntary).** The project Applicant can implement a voluntary commute trip reduction (CTR) program. The CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation (e.g., carpooling, taking transit, walking, and bicycling), thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-5. Implement Commute Trip Reduction Program (Voluntary)" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure. • **Implement Commute Trip Reduction Marketing.** The project Applicant can implement a marketing strategy that promotes a CTR program. Information sharing and marketing promote and educate employees about alternative travel choices (e.g., carpooling, taking transit, walking, and biking), thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-7. Implement Commute Trip Reduction Marketing" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure. • **Provide Ridesharing Program.** The project Applicant can implement and fund a ridesharing program and establish a permanent transportation management	

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		association. Ridesharing encourages carpooled vehicle trips, replacing single-occupancy vehicle trips, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-8. Provide Ride Sharing Program" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure. • **Implement Subsidized or Discounted Transit Program.** The project Applicant can provide subsidized or discounted, or free transit passes for employees. This measure would encourage the use of transit by reducing the cost for choosing transit, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-9. Implement Subsidized or Discounted Transit Program" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the subsidy amount and the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure. • **Provide Additional Electric Vehicle Charging Infrastructure.** The project Applicant can install onsite electric vehicle chargers in an amount beyond what is required by the latest California Green Building Standards (CALGreen). Electric vehicle chargers enable Plugin-Hybrid Electric Vehicles to drive a larger share of VMT in electric mode. The latest CALGreen, California Building Code, requires provision of infrastructure to accommodate electric vehicle chargers for land use developments. Additional electric charging stations, beyond CALGreen requirements, can be considered as a GHG mitigation measure according to CAPCOA. Although it is understood that provision of electric charging stations would not reduce VMT, it would reduce GHG, which can be considered equivalent to reduction in VMT. CAPCOA Handbook transportation measure "T-14. Provide Electric Vehicle Charging Infrastructure" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the number of chargers that would be installed at the project site and the total number of vehicles that would access the project site per day, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.	
Implementation of the proposed project would result in a total City VMT (1,602,833) that is higher than the threshold (1,600,754) and would result in a net increase of 2,079 (0.13 percent), exceeding the City's VMT threshold.	PS	**Mitigation Measure TRA-1: Transportation Demand Management.** (Refer to above)	LTSM
4.12 TRIBAL CULTURAL RESOURCES			
Ground disturbing activities during construction, including grading and excavation, could cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074.	PS	**Mitigation Measure TCR-1: Native American Monitoring of Ground Disturbing Activities.** Prior to the issuance of any grading permit for the proposed project, the Applicant shall retain a Native American Monitor approved by the interested tribe(s). The Applicant shall allow 45 days from initial contact with the interested tribe(s) to enter into a contract with the tribe(s) for monitoring services. If the Applicant can demonstrate to the City they were unable to secure an agreement with the interested tribe(s), or if the contracted tribe(s) fails to fulfill its obligation under the contract terms, then the Applicant may retain an alternative qualified tribal monitor approved by	LTSM

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		the City. "Ground-disturbing activity" shall include, but is not limited to, demolition, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching on the project site. A copy of the executed monitoring agreement shall be submitted to the Development Services Director of the City of San Juan Capistrano, or their designee, prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. The tribal monitor shall also provide appropriate insurance certificates. The monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the interested tribe(s). Monitor logs shall identify and describe any discovered Tribal Cultural Resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCRs"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant/City upon written request to the Tribe. A final monitoring report shall be provided to the City upon project completion. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the tribe(s) from a designated point of contact for the Applicant/City that all ground-disturbing activities and phases that may involve ground-disturbing activities in native (previously undisturbed) soil has occurred (i.e., no tribal monitoring shall be required for landscaping activities occurring after completion of project grading and trenching, as this soil will have been previously monitored) or in connection with the project are complete; or (2) a determination and written notification by the tribe(s) to the Applicant/City that no future, planned construction activity and/or development/construction phase associated with the project possesses the potential to impact TCRs. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Native American Monitor and/or archaeologist. The tribe(s) will coordinate with other tribes that are culturally affiliated with the project area to recover and retain all discovered TCRs in the form and/or manner agreed to. Note that this measure is not intended to conflict with the regulatory compliance process outlined in Regulatory Compliance Measure CUL-2. In the unlikely event that human remains are encountered at the project site, the City and Project Applicant shall be required to follow the appropriate process outlined in CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98. **Mitigation Measure TCR-2: Repatriation and Reburial of Tribal Cultural Resources.** Prior to the issuance of any grading or ground-disturbing permits, the City and Project Applicant, in consultation with the Native American Monitor, shall identify and designate an area within the project site that is suitable for long-term protection and confidentiality to be reserved for the potential repatriation and reburial of Native American cultural items, including, but not limited to, artifacts, grave goods, items of patrimony, or human remains, should such resources be encountered during implementation of the proposed project, unless otherwise directed by the interested tribe(s). The designated repatriation and reburial area shall be documented in the project plans and shall be protected from future ground disturbance, except as may be necessary to accommodate repatriation activities.	

Table 1.A: Summary of Impacts and Mitigation Measures from this Draft EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.13 UTILITIES AND SERVICE SYSTEMS			
There are no significant impacts on utilities and service systems.			
4.14 WILDFIRE			
There are no significant impacts related to wildfire.			

Source: LSA (2026).

Table 1.B: Applicable Regulatory Compliance Measures

Environmental Issue Area	Regulatory Compliance Measures
AESTHETICS	
No regulatory compliance measures related to aesthetics are applicable to the proposed project.	
AGRICULTURE AND FORESTRY RESOURCES	
No regulatory compliance measures related to agriculture and forestry resources are applicable to the proposed project.	
AIR QUALITY	
No regulatory compliance measures related to air quality are applicable to the proposed project.	
BIOLOGICAL RESOURCES	
Special-Status Wildlife Species	**Regulatory Compliance Measure HYD-1**: **Construction General Permit.** (Refer to Hydrology and Water Quality) **Regulatory Compliance Measure HYD-2**: **Erosion and Sediment Control Plans.** (Refer to Hydrology and Water Quality) **Regulatory Compliance Measure HYD-3: Water Quality Management Plan.** (Refer to Hydrology and Water Quality)
CULTURAL RESOURCES	
Archaeological Resources	**Regulatory Compliance Measure CUL-1**: **Cultural Resources Monitoring and Accidental Discovery.** Prior to the issuance of grading permits, and consistent with City Council Policy 601, the project Applicant shall retain, with approval of the City of San Juan Capistrano (City) Development Services Director, or designee, a qualified archaeological monitor. A monitoring plan shall be prepared by the archaeologist and implemented upon approval by the City. Prior to issuance of grading permits, the project Applicant, with City approval, shall also retain a Native American monitor. Both monitors shall be present on the project site during ground-disturbing activities to monitor rough and finish grading, excavation, and other ground-disturbing activities in the native soils. Because no cultural resources were identified on the project site, both monitors are not required to be present on a full-time basis, but shall spot check ground-disturbing activities to ensure that no cultural resources are impacted during construction activities. If cultural materials are discovered during site preparation, grading, or excavation, the construction contractor shall divert all earthmoving activity within and around the immediate discovery area (i.e. 25 feet from the find) until a qualified archaeologist can assess the nature and significance of the find. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. To the extent feasible, project activities shall avoid these deposits (i.e., protect in place). Where avoidance is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing on the California Register of Historical Resources. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation can include, but is not necessarily limited to: excavation of the deposit in accordance with a data recovery plan (see California Code of Regulations [CCR] Title 4(3) Section 5126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; production of a report detailing the methods, findings, and significance of the archaeological site and associated materials; curation of archaeological materials at an appropriate facility for future research and/or display; an interpretive display of recovered archaeological materials at a local school, museum, or library; and public lectures at local schools and/or historical societies on the findings and significance of the site and recovered archaeological materials. The City Development Services Director, or designee, shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.
Human Remains	**Regulatory Compliance Measure CUL-2**: **Human Remains.** In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). 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 PRC Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City of San Juan Capistrano shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of San Juan Capistrano shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.
ENERGY	
No regulatory compliance measures related to energy are applicable to the proposed project.	
GEOLOGY AND SOILS	
Strong Seismic Ground Shaking; Seismic-Related Ground Failure, including Liquefaction; Unstable Geologic Unit; and Expansive Soils	**Regulatory Compliance Measure GEO-1: California Building Code and Geotechnical Recommendations.** Prior to the approval of any grading and/or building permits, the Applicant shall provide evidence to the City of San Juan Capistrano for review and approval that on-site structures, features, and facilities have been designed and will be constructed in conformance with applicable provisions of the California Building Code in effect at the time of City review and the recommendations cited in the project-specific Geotechnical Investigation. This measure shall be implemented to the satisfaction of the Director of the City of San Juan Capistrano Department of Development Services, Building Division, or designee.

Table 1.B: Applicable Regulatory Compliance Measures

Environmental Issue Area	Regulatory Compliance Measures
Soil Erosion and/or Loss of Topsoil	**Regulatory Compliance Measure HYD-1**: **Construction General Permit.** (Refer to Hydrology and Water Quality) **Regulatory Compliance Measure HYD-2**: **Erosion and Sediment Control Plans.** (Refer to Hydrology and Water Quality) **Regulatory Compliance Measure HYD-3: Water Quality Management Plan.** (Refer to Hydrology and Water Quality)
GREENHOUSE GAS EMISSIONS	
No regulatory compliance measures related to greenhouse gas emissions are applicable to the proposed project.	
HAZARDS AND HAZARDOUS MATERIALS	
No regulatory compliance measures related to hazards and hazardous materials are applicable to the proposed project.	
HYDROLOGY AND WATER QUALITY	
Construction Water Quality; Erosion or Siltation; On- or Off-Site Flooding; Exceed Capacity of Stormwater Drainage Systems or Provide Additional Sources of Polluted Runoff; Conflict or Obstruction of a Water Quality Plan or Sustainable Groundwater Management Plan	**Regulatory Compliance Measure HYD-1**: **Construction General Permit.** Prior to issuance of a grading permit, the Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002* (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Stormwater Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). As required by the Section 8-14.107 of the City of San Juan Capistrano's (City) Municipal Code, construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained for the project from the SMARTS and provided to the City of San Juan Capistrano Building Official, or designee, to demonstrate that coverage under the Construction General Permit has been obtained. Project construction shall comply with all applicable requirements specified in the Construction General Permit, including but not limited to, preparation of a SWPPP and implementation of construction site Best Management Practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the project. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and shall include BMPs (e.g., Sediment Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in stormwater runoff. Construction Site BMPs shall also conform to the requirements specified in the latest edition of the Orange County Stormwater Program *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* to control and minimize the impacts of construction and construction related activities, materials, and pollutants on the watershed. Upon completion of construction activities and stabilization of the project site, a Notice of Termination shall be submitted via SMARTS. **Regulatory Compliance Measure HYD-2**: **Erosion and Sediment Control Plans.** In compliance with the requirements of Sections 8-2.15, 8-2.16, and 8-14.107 of the San Juan Capistrano Municipal Code, the project Applicant shall submit a pollution control plan, construction BMP plan, and/or erosion and sediment control plan to the City of San Juan Capistrano Building Official, or designee, for review and approval prior to issuance of a grading permit. The project Applicant shall also install and maintain erosion control devices year-round in compliance with the City-approved pollution control plan, construction BMP plan, and/or erosion and sediment control plan. The project Applicant shall ensure that the construction BMPs are inspected and maintained prior to, during, and after rain events.
Operational Water Quality; Erosion or Siltation; On- or Off-Site Flooding; Exceed Capacity of Stormwater Drainage Systems or Provide Additional Sources of Polluted Runoff; Conflict or Obstruction of a Water Quality Plan or Sustainable Groundwater Management Plan	**Regulatory Compliance Measure HYD-3: Water Quality Management Plan.** Prior to issuance of grading or building permits, the project Applicant shall submit a Final Water Quality Management Plan (WQMP) to the City of San Juan Capistrano City Engineer, or designee, for review and approval in compliance with Sections 8-14.105 and 8-14.106 of the City Municipal Code and the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region (South Orange County MS4 Permit), Order R9-2013-0001, NPDES No. CAS6010266, as amended by Order No. R9-2015-0001, or any other subsequent permit. The Final WQMP shall be prepared consistent with the requirements of the Model Water Quality Management Plan (Model WQMP) for South Orange County (County of Orange 2017) and the Technical Guidance Document for the Preparation of Conceptual/ Preliminary and/or Project Water Quality Management Plans (WQMPs) (County of Orange 2018), or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project site. The City of San Juan Capistrano Building Official and City Engineer, or designees, shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design. **Regulatory Compliance Measure HYD-4** : **Final Hydrology and Hydraulics Analysis.** Prior to issuance of grading or building permits, the project Applicant shall submit Final Hydrology and Hydraulics Analysis to the City of San Juan Capistrano City Engineer, or designee, for review and approval. The Final Hydrology and Hydraulics Analysis shall be prepared consistent with the requirements of the *Orange County Hydrology Manual* and the *Orange County Hydrology Manual Addendum No. 1*, or subsequent guidance manuals. The Final Hydrology and Hydraulics Analysis shall confirm that the on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded. The City of San Juan Capistrano Building Official and City Engineer, or designees, shall ensure that the drainage facilities specified in the Final Hydrology and Hydraulics Analysis are incorporated into the final project design.
LAND USE AND PLANNING	
No regulatory compliance measures related to land use and planning are applicable to the proposed project.	
MINERAL RESOURCES	

Table 1.B: Applicable Regulatory Compliance Measures

Environmental Issue Area	Regulatory Compliance Measures
No regulatory compliance measures related to mineral resources are applicable to the proposed project.	
NOISE	
Construction Noise	**Regulatory Compliance Measure NOI-1:** The project construction contractor shall limit construction activities to between the hours of 7:00 a.m. and 6:00 p.m., Mondays through Fridays, and between the hours of 8:30 a.m. and 4:30 p.m. on Saturdays, pursuant to Section 9-3.531 of the City of San Juan Capistrano's Municipal Code. Construction noise is prohibited outside of these hours, on Sundays, and on national holidays (Section 9-3.531(d)).
Operational Noise	**Regulatory Compliance Measure NOI-2**: Agricultural activities shall be limited to between the hours of 7:00 a.m. and 8:00 p.m., Monday through Saturday, pursuant to Section 9-3.531(d)(6) of the City's Municipal Code. Agricultural activities are prohibited outside of these hours or any time on Sundays or on federal holidays.
POPULATION and HOUSING	
No regulatory compliance measures related to population and housing are applicable to the proposed project.	
PUBLIC SERVICES	
No regulatory compliance measures related to public services are applicable to the proposed project.	
RECREATION	
No regulatory compliance measures related to recreation are applicable to the proposed project.	
TRANSPORTATION	
No regulatory compliance measures related to transportation are applicable to the proposed project.	
TRIBAL CULTURAL RESOURCES	
Substantial Adverse Change in the Significance of a Tribal Cultural Resource	**Regulatory Compliance Measure CUL-1**: **Cultural Resources Monitoring and Accidental Discovery.** (Refer to Cultural Resources) **Regulatory Compliance Measure CUL-2**: **Human Remains.** (Refer to Cultural Resources)
UTILITIES AND SERVICE SYSTEMS	
No regulatory compliance measures related to utilities and service systems are applicable to the proposed project.	
WILDFIRE	
No regulatory compliance measures related to wildfire are applicable to the proposed project.	

Source: LSA (2026).

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2.0 INTRODUCTION

2.1 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

In compliance with the California Environmental Quality Act (CEQA), this Draft Environmental Impact Report (EIR) describes the potential environmental impacts of the proposed Legacy Ranch Project (herein referred to as the "proposed project" or "project") submitted by Almquist (the project Applicant). For purposes of CEQA, the City of San Juan Capistrano (City) is the Lead Agency for environmental review.

The purpose of this Draft EIR is to inform City decision-makers, public agencies, and the general public about the proposed project and the potential physical environmental consequences of project implementation. This Draft EIR also examines alternatives to the proposed project and recommends mitigation measures to reduce or avoid potentially significant physical environmental impacts to the extent feasible. This Draft EIR will be used as an informational document by the City's Planning Commission, City Council, other public agencies, and the public in their review of the proposed project and associated approvals described below and in more detail in Chapter 3.0, Project Description.

2.2 PROPOSED PROJECT

The proposed project would develop the Legacy Ranch within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, California. The Legacy Ranch would consist of several different land uses arranged in seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core. Each core would incorporate community amenities, as described in more detail in Chapter 3.0, Project Description.

Changes to permitted uses currently identified in the NWOS Specific Plan would include the following:

- Adding religious gatherings and removing caretaker quarters to the list of permitted events/uses at the Swanner House.

In addition to the permitted uses currently identified in the NWOS Specific Plan, the following proposed uses would be added as permitted uses:

- Farming-related retail stands and educational tours; and
- Passive recreation amenities.

Changes to the conditionally permitted uses currently identified in the NWOS Specific Plan would include the following:

- Changing the current conditionally permitted use pertaining to wedding venues to include all events venues, in addition to the Swanner House and

- Changing the current conditionally permitted use to allow the sale and service of alcohol not involving the Swanner House.

In addition to the conditionally permitted uses currently identified in the NWOS Specific Plan, the following proposed conditionally permitted uses would be added as conditionally permitted uses:

- Eating and Drinking Establishments; and

- Group, social, public and private event activities with 499 or fewer participants so long as the use does not restrict public access to the public trails, dog park, and Putuidem Village. Events may include ancillary services such as shuttle services, bus and trailer parking, food and beverage services, and amplified sound.

The following uses would be added as accessory uses to permitted or conditionally permitted uses:

- A maximum of four Caretakers Residences; and

- Offices.

In addition, the NWOS Specific Plan includes clarification that the allowed uses for the portion of the NWOS Specific Plan area owned by Orange County Flood Control District (OCFCD) shall be governed by its General Plan land use designation of Community Park (CP) and General Open Space (GOS).

The proposed project also includes an Amendment to the NWOS Specific Plan to allow for development of the Legacy Ranch on the project site. The amended NWOS Specific Plan would add the new land uses and activities identified above as permitted, conditionally permitted, and accessory uses of the NWOS Specific Plan.

In addition, the proposed project is pursuing a Conditional Use Permit (CUP) for the use of the project site as a venue for group activities and community events, such as organized gatherings with a shared purpose (e.g., recreational, educational, cultural, or social), occurring between 8:00 a.m. and 11:00 p.m. The CUP would also allow food and beverage services, including the service of alcoholic beverages in full compliance with all applicable permits and regulations of the California Department of Alcoholic Beverage Control (ABC) and the use of amplified sound equipment, provided it does not exceed the noise limits established in the City of San Juan Capistrano's Noise Ordinance. The CUP would permit a maximum of 499 combined on-site guests and participants at any one time, inclusive of individuals attending events at the Swanner House.

The proposed project would also amend the development standards of the NWOS Specific Plan, including reducing the required setback from the railroad track from 50 feet to 20 feet, removing the required internal setbacks from the Swanner House and Dr. Joe Cortese Dog Park, reducing the required setback from the existing trails from 25 feet to 5 feet, and changing the Trabuco Creek setback to be 100 feet from the conservation covenant boundary instead of the creek edge. In addition, the following structures would be permitted to be constructed within the required setbacks:

- Playgrounds;
- Public restrooms up to 1,500 square feet;
- Signage; and
- Shade structures with no more than 50 percent enclosed walls, 18 feet tall, and up to 500-square-foot setbacks may be located within the Specific Plan specified setbacks up to a reduced setback of 5 feet.

The proposed project also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The proposed project would also include a new 2,500 square foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village.

2.2.1 Access, Circulation, and Parking

Access to the proposed Legacy Ranch would be provided by three ingress/egress driveways from Camino Capistrano, including the existing access driveway south of the Swanner House and two proposed driveways that would provide access to the Community Building Core and entry road parking areas. Overall, the proposed project would provide a total of approximately 802 dedicated parking spaces throughout the proposed cores, including the 20 truck and trailer parking spaces within the proposed Equestrian Core. Additional temporary parking spaces could be provided by utilizing other areas throughout the project site. The precise location of temporary parking would be determined as part of logistical planning for each event, and could further include additional temporary parking off-site and the use of valet parking services.

The proposed project would also include a pedestrian bridge over Trabuco Creek that would connect the Community Building Core to the rest of the Legacy Ranch, internal decomposed granite roads, pedestrian paths, and new trail connections to the Trabuco Creek Trail throughout the project site.

2.2.2 Landscaping and Open Space

The proposed project would include active and passive recreational facilities and extensive open space. Some existing trees and vegetation on the project site would be maintained, and the proposed project would include new landscaping throughout the project site. If present on the project site, existing trees that meet the criteria for designation as a Heritage Tree[1] would be integrated into the landscape plan for the proposed project. In addition, the removal of any existing mature tree (i.e., a tree with a trunk diameter of six inches or more measured at three feet above grade) would require a Tree Removal Permit pursuant to Section 9-3.557 of the City's Municipal

[1] In the City, a tree is considered a heritage tree when the tree has a trunk diameter at breast height (dbh) of 36 inches or greater, and is a specimen of one of the following species: *Schinus molle* (California pepper); *Quercus* spp. (oak); *Cedar* spp. (cedar); *Eucalyptus globulus* (blue gum eucalyptus); *Juglans* spp. (walnut); *Olea europaea* (olive); *Platanus* spp. (sycamore); or *Populus* spp. (cottonwood).

Code. Tree removal would meet the City's Tree Removal Permit requirements and conditions, including those related to the replacement of a mature tree.

In addition, the approximately 14-acre existing conservation covenant encompassing Trabuco Creek and both its banks would be untouched. Development of proposed structures would be set back from the covenant boundary by an approximately 100-foot buffer, consistent with the NWOS Specific Plan Development Standards. Although the proposed pedestrian bridge over Trabuco Creek itself would traverse the 100-foot buffer and the Trabuco Creek conservation covenant, the footings for the proposed bridge are planned to be located outside of the jurisdictional boundary of the creek area.

2.2.3 Utilities and Infrastructure

The project site is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunications infrastructure; however, it is expected that these utilities would need to be expanded and/or upgraded to accommodate the various land uses included in the proposed project.

Water service for the proposed project would be provided by Santa Margarita Water District (SMWD) via an existing water service line located in Camino Capistrano. Wastewater service would be provided by SMWD via an existing 8-inch sewer main that is connected to the Moulton Niguel Water District (MNWD) 12-inch trunk line located adjacent to the OCTA-owned rail line. Electricity and natural gas would continue to be supplied by San Diego Gas & Electric Company (SDG&E) and the Southern California Gas Company (SoCalGas), respectively, via extensions from existing electrical and natural gas transmission lines in the vicinity of the project site. Solar panels would be included in the design of the proposed equestrian arena in the Equestrian Core.

The northernmost well, located adjacent to the railroad tracks east of the agricultural core would be preserved. The existing access easement would also be preserved. The central well, located between the Equestrian Core and the Putuidem Village, would be integrated into the landscape plan as part of the proposed project. A future access easement would be incorporated into the circulation design for the proposed project in order to allow continued access to the northernmost well by the SMWD. The southernmost well, located in the Equestrian Core, would be abandoned and plugged as part of the proposed project.

Refer to Chapter 3.0, Project Description, for a complete description of the proposed project's location, context, and objectives, details of the proposed project itself, and a summary of required approvals and entitlements.

2.3 SCOPING PROCESS

As part of the preparation of the Draft EIR, the City contacted other State, regional, and local agencies and interested parties to inform them of the proposed project and to solicit comments on the scope of the environmental review. This included issuance of a Notice of Preparation (NOP) and hosting a public scoping meeting. The following sections describe the scoping process undertaken for the Draft EIR.

2.3.1 Notice of Preparation

In accordance with *State CEQA Guidelines* Section 15082, the City submitted an NOP along with an Initial Study for this project to the State Clearinghouse (SCH) on November 13, 2025. The NOP was also filed with the Orange County Clerk-Recorder and published in the Capistrano Valley News, the City's newspaper of record, on November 13, 2025. In addition, the NOP was posted on the site and mailed to property owners of the properties located within 1,000 feet (approximately 166 property owners) of the project site.

The public scoping period lasted 32 days, beginning on Thursday, November 13, 2025, and concluding on Monday, December 15, 2025. During this time, written comments were solicited on environmental issues that should be evaluated in the Draft EIR. Copies of the NOP, the NOP distribution list, and the written comments received are provided in **Appendix A: Public Involvement**.

Table 1.A: Summary of Scoping Comments Received provides a summary of the comments received during the public scoping period**.**

Table 1.A: Summary of Scoping Comments Received

Agency/ Organization/ Individual	Date	Comments	Addressed in Section(s) of the Draft EIR
Native American Heritage Commission (NAHC)	November 14, 2025	Outlined the City's tribal consultation requirements under Assembly Bill 52 and Senate Bill 18.	Tribal Cultural Resources
Colton Almquist	November 19, 2025	Requested the EIR discuss project impacts related to transportation and aesthetics.	Aesthetics and Transportation
Chandler Almquist	November 19, 2025	Requested the EIR discuss project impacts on plants and animals.	Biological Resources
Marline Draper	December 7, 2025	Raised concerns over the proposed project's consistency with the NWOS Specific Plan and Measure X.	Other CEQA Considerations
Larry Kramer	December 9, 2025	Raised concerns about impacts related to light and glare; impacts to Trabuco Creek due to contamination by horses and due to construction of the proposed pedestrian bridge; the proposed project's compatibility with the CalTrout fish ladder project; energy impacts; the ability of the existing sewer line to serve the proposed project; the proposed project's consistency with the Specifical Plan and Measure X; and the management of stormwater, including runoff from equestrian uses.	Biological Resources, Energy, Hydrology and Water Quality, Utilities and Service Systems, and Other CEQA Considerations
Mitch Frisch	December 9, 2025	Raised concerns with privatization of the NWOS and mentioned the 1990 Bond Measure.	Project Description
Mark Rottman	December 9, 2025	Expressed general opposition to the proposed project and raised concerns over public access.	Project Description, Other CEQA Considerations

Table 1.A: Summary of Scoping Comments Received

Agency/ Organization/ Individual	Date	Comments	Addressed in Section(s) of the Draft EIR
Erin Beyer	December 10, 2025	Raised concerns over the proposed project's consistency with the NWOS Specific Plan and Measure X.	Other CEQA Considerations
Edward Beyer	December 11, 2025	Raised concerns over the proposed project's consistency with the NWOS Specific Plan and Measure X.	Other CEQA Considerations
California Department of Transportation (Caltrans), District 2	December 11, 2025	Identified potential traffic impacts with implementation of the proposed project, encouraged the incorporation of Complete Streets and additional bicycle infrastructure into the proposed project, and encouraged coordination with the Orange County Transportation Authority (OCTA) for opportunities to enhance multimodal transit strategies. Caltrans also requested that the Draft EIR include a discussion relating to City's Circulation Element in promoting an advanced public transportation network (Circulation Goal 2) and stated that any work performed within Caltrans right-of-way will require discretionary review and approval by Caltrans and an encroachment permit. Lastly, Caltrans noted that project plans and traffic control plans must be stamped and signed by a licensed engineer.	Transportation
Tim Hankins	December 11, 2025	Expressed general opposition to the proposed project.	Other CEQA Considerations
Jan Siegel	December 12, 2025	Discussed the 1990 Bond Measure.	Other CEQA Considerations
Jimv0721@icloud.com	December 13, 2025	States that there are too many proposed farm stay units and raised concerns over potential traffic impacts with implementation of the proposed project.	Transportation and Other CEQA Considerations
Gary Tucker	December 13, 2025	Expressed general opposition to the proposed project.	Other CEQA Considerations
Orange County Transportation Authority (OCTA)	December 15, 2025	Requests the installation of an appropriate barrier or fencing adjacent to the railroad tracks and that any lighting installed near the tracks be directed away from the tracks. OCTA also requests that drainage be designed and directed away from the tracks and that all improvements and construction activities within or adjacent to the rail corridor must comply with Southern California Regional Rail Authority standards, and that the proposed applicant must coordinate with the OCTA Right-of-Way Department for access permits during construction.	Transportation
California Department of Fish and Wildlife (CDFW)	December 15, 2025	Outlined the CDFW's role as a Trustee Agency for fish and wildlife resources and states that the proposed project could result in impacts to biological resources and special-status species, including Crotch's bumblebee, white-tailed kite, coastal California gnatcatcher, Least Bell's vireo; nesting birds; and the water quality of Trabuco Creek. CDFW recommended	Biological Resources

Table 1.A: Summary of Scoping Comments Received

Agency/ Organization/ Individual	Date	Comments	Addressed in Section(s) of the Draft EIR
		surveys and mitigation to address these potential impacts. CDFW also requested the Draft EIR include a discussion of impacts from equestrian uses, cattle, rodenticides, herbicides, pesticides, alternatives to the proposed project, and cumulative impacts. In addition, CDFW provided guidelines for the biological resources assessment and permits that may be required. Lastly, CDFW requests that all environmental data be submitted to CDFW and states that filing fees will be required.	

Source: Compiled by LSA (2025).

2.3.2 Scoping Meeting

The City held a public scoping meeting on November 19, 2025, to solicit input from the public on topics to be analyzed in this Draft EIR. The meeting was held at the La Sala Auditorium at the San Juan Capistrano Public Library at 31495 El Camino Real in San Juan Capistrano, California.

2.3.3 Areas of Controversy

Key environmental issues and concerns raised during the scoping process include those related to aesthetics, biological resources, energy, hydrology and water quality, transportation, tribal cultural resources, and utilities and service systems. This Draft EIR addresses each of these areas of concern or controversy in detail, as well as other environmental topics relevant to the proposed project. This Draft EIR also examines and identifies project-related and cumulative environmental impacts and proposes mitigation measures designed to reduce or eliminate potentially significant impacts.

2.4 SCOPE OF THIS DRAFT EIR

As previously discussed, an Initial Study was prepared for the proposed project (provided in Appendix B). Several environmental resource topics were evaluated in the Initial Study, and it was determined the proposed project would result in no impact or a less than significant impact to these resources. Accordingly, these topics are not further addressed in this Draft EIR. These topics include: Agriculture and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire. In addition, several questions addressed under environmental resource topics carried forward for further analysis in this Draft EIR were determined to have no impact or a less than significant impact, including questions associated with the following: Aesthetics, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, and Utilities and Service Systems. Accordingly, these specific questions have been screened out and will not be discussed further in this Draft EIR.

Based on the technical analyses completed for the proposed project, consultation with City staff, and input received during the scoping process, the following environmental topics are addressed in Chapter 4.0, Setting, Impacts, and Mitigation Measures, of this Draft EIR:

- 4.1: Aesthetics
- 4.2: Air Quality
- 4.3: Biological Resources
- 4.4: Cultural Resources
- 4.5: Energy
- 4.6: Geology and Soils
- 4.7: Greenhouse Gas Emissions
- 4.8: Hazards and Hazardous Materials
- 4.9: Hydrology and Water Quality
- 4.10: Noise
- 4.11: Transportation
- 4.12: Tribal Cultural Resources
- 4.13: Utilities and Service Systems

Chapter 6.0, Other CEQA Considerations, of this Draft EIR provides a summary of the analysis and conclusions for each environmental topic evaluated in the Initial Study and not further addressed in Chapter 4.0 of this Draft EIR. Given that many topic areas were scoped out and only 13 topic areas will be evaluated in detail in this Draft EIR, the document may also be referred to as a focused EIR.

2.4.1 Revisions to the Proposed Project Since Preparation of the Initial Study

After the NOP and Initial Study were circulated for public and agency review and based on comments received from the public, the project Applicant revised the proposed project to remove the Farm Stay Core and associated improvements, including the 70 “farm stay” units, farm stay center and amenities building, swimming pool, amphitheater stage, and other community building uses/spaces, and expand the Equestrian and Natural Cores. In addition, minor modifications to the approximately square footage of proposed improvements in the other proposed cores were made. This revised proposed project is described in Chapter 3,0, Project Description, and is the subject of this Draft EIR.

The revisions to the proposed project would not change the conclusions of the Initial Study as the removal of the Farm Stay Core represents an overall reduction in development and the overall intensity of proposed uses at the project site.

2.5 FORMAT OF THIS DRAFT EIR

Pursuant to *State CEQA Guidelines* Section 15120(c), this Draft EIR contains the information and analysis required by Sections 15122 through 15131. Each of the required elements is covered in one of the following Draft EIR chapters:

- **Chapter 1.0: Executive Summary.** Chapter 1.0 contains the Executive Summary of this Draft EIR, listing all potentially significant impacts of the proposed project, mitigation measures that have been recommended to reduce any potentially significant impacts of the proposed project, and the level of significance of each impact following implementation or incorporation of mitigation.

- **Chapter 2.0: Introduction.** Chapter 2.0 contains a discussion of the purpose and intended use of this Draft EIR, background on initiation of the CEQA process, the scoping process, and areas of controversy known to the Lead Agency, including issues raised by the public during scoping.

- **Chapter 3.0: Project Description.** Chapter 3.0 includes discussion of the proposed project's geographical setting; the project site's existing land uses; and the proposed project's goals, objectives, characteristics, components, and phasing.

- **Chapter 4.0: Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures.** Chapter 4.0 is organized into topical sections. Chapter 4.0 provides a general description for how each topical section is organized as well as a list of cumulative projects that were considered in the cumulative analysis. Generally, each topic section includes a discussion of the existing setting, methodology, thresholds of significance, analysis of potential project impacts, analysis of potential cumulative impacts, mitigation measures, and level of significance after the incorporation of mitigation measures.

  The environmental setting discussions describe the "existing conditions" of the environment on the project site and in the project vicinity as they pertain to the environmental issues being analyzed (Section 15125 of the *State CEQA Guidelines*).

  The direct and indirect significant effects of the proposed project on the environment are identified and described, giving due consideration to both the short-term and long-term effects as necessary (Section 15126.2[a] of the *State CEQA Guidelines*), which include potential impacts during construction and operation.

  Chapter 4.0 also includes within each environmental impact analyzed a discussion of the cumulative effects of the project when considered in combination with other projects, causing related impacts as required by Section 15130 of the *State CEQA Guidelines*. Cumulative impacts are based on the build out of the project and the surrounding area, including all other known proposed projects in the surrounding area.

  The discussions of mitigation measures identify and describe feasible measures that could minimize or lessen significant adverse impacts for each significant environmental effect identified in the EIR (Section 15126[c] of the *State CEQA Guidelines*). The level of significance before and after mitigation is reported in each section. Unavoidable adverse effects are identified where mitigation is not expected to reduce the effects to less than significant levels.

- **Chapter 5.0: Alternatives:** Chapter 5.0 provides an evaluation of the alternatives to the proposed project in addition to the CEQA-required No Project Alternative.

- **Chapter 6.0: Other CEQA Considerations.** Chapter 6.0 includes CEQA-mandated discussions on the following topics as required by Section 15126 of the *State CEQA Guidelines*: (1) significant adverse environmental impacts for which either no mitigation or only partial mitigation is feasible; (2) significant irreversible environmental changes that would result from implementation of the proposed project; and (3) growth-inducing impacts of the proposed project.

- **Chapter 7.0 Report Preparation:** Chapter 7.0 identifies preparers of the Draft EIR and the references cited.

- **Appendices:** Includes the appendices to this Draft EIR, including:
    - Appendix A: NOP and Comment Letters
    - Appendix B: Initial Study
    - Appendix C: CalEEMod Output Sheets
    - Appendix D: Health Risk Assessment
    - Appendix E: Biological Resources Assessment
    - Appendix F: Cultural Resources Assessment
    - Appendix G: Energy Calculations
    - Appendix H: Geotechnical Investigation
    - Appendix I: Phase I Environmental Site Assessment
    - Appendix J: Phase II Environmental Site Assessment
    - Appendix K: Drainage Study
    - Appendix L: Water Quality Management Plan
    - Appendix M: Noise Measurements
    - Appendix N: Transportation Impact Analysis

2.6 PUBLIC REVIEW OF THE DRAFT EIR

All agencies, organizations, and individuals are invited to comment on the information presented in the Draft EIR during the public review period. Specifically, comments are requested on the scope and adequacy of the environmental analysis. Respondents are also asked to provide or identify additional environmental information that is germane but that may not have been used in the analysis. Any parties interested in reviewing this Draft EIR and/or the documents incorporated by reference may do so at the following locations:

- City of San Juan Capistrano, Development Services Department, 32400 Paseo Adelanto, San Juan Capistrano, CA 92675

- San Juan Capistrano Library, 31495 El Camino Real, San Juan Capistrano, CA 92675

This Draft EIR is also available on the City's website at:
https://www.sanjuancapistrano.org/221/Environmental-Documents.

In compliance with CEQA, all comments received from agencies and individuals on this Draft EIR will be accepted during the 45-day public review period from July 2, 2026, to August 17, 2026.

Comments on the Draft EIR may be submitted to:

Planning Manager, Laura Stokes
Lstokes@sanjuancapistrano.org
32400 Paseo Adelanto
San Juan Capistrano, CA 92675

Please include your name, address, and contact information in your correspondence. All comments on this Draft EIR will become part of the public record.

Following the close of the review period, the City will prepare responses to all comments and will compile these comments and responses into a Final EIR. All responses to comments submitted on the Draft EIR by agencies will be provided to those agencies at least 10 days prior to final action on the project. The San Juan Capistrano City Council will make findings regarding the extent and nature of the impacts as presented in the Final EIR. The Final EIR will need to be certified as complete by the City prior to making a decision to approve or deny the proposed project. Public input is encouraged at all public hearings before the City.

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3.0 PROJECT DESCRIPTION

This chapter describes the proposed Legacy Ranch Project (proposed project), the subject of this Draft Environmental Impact Report (EIR) prepared pursuant to the California Environmental Quality Act (CEQA). The proposed project would develop the Legacy Ranch, which would consist of equestrian facilities, a chapel, an event space, agricultural uses, and active and passive recreational uses, within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, Orange County (Assessor's Parcel Numbers [APNs] 121-050-03, -04, -14, -17, -18, -19, -20, and -29). The City of San Juan Capistrano (City) is the lead agency for review of the proposed project under CEQA.

This chapter includes a description of the proposed project's location, background, objectives, and technical, economic, and environmental characteristics, as required by Section 15124(c) of the *State CEQA Guidelines.* It also summarizes the intended uses of the Draft EIR, lists required permits and approvals, and identifies related environmental review and consultation requirements required by federal, State, and local laws, regulations, or policies.

3.1 PROJECT SITE

This section describes the project site's location, boundaries, geographic context, and a brief overview of the existing land uses within and in the vicinity of the project site.

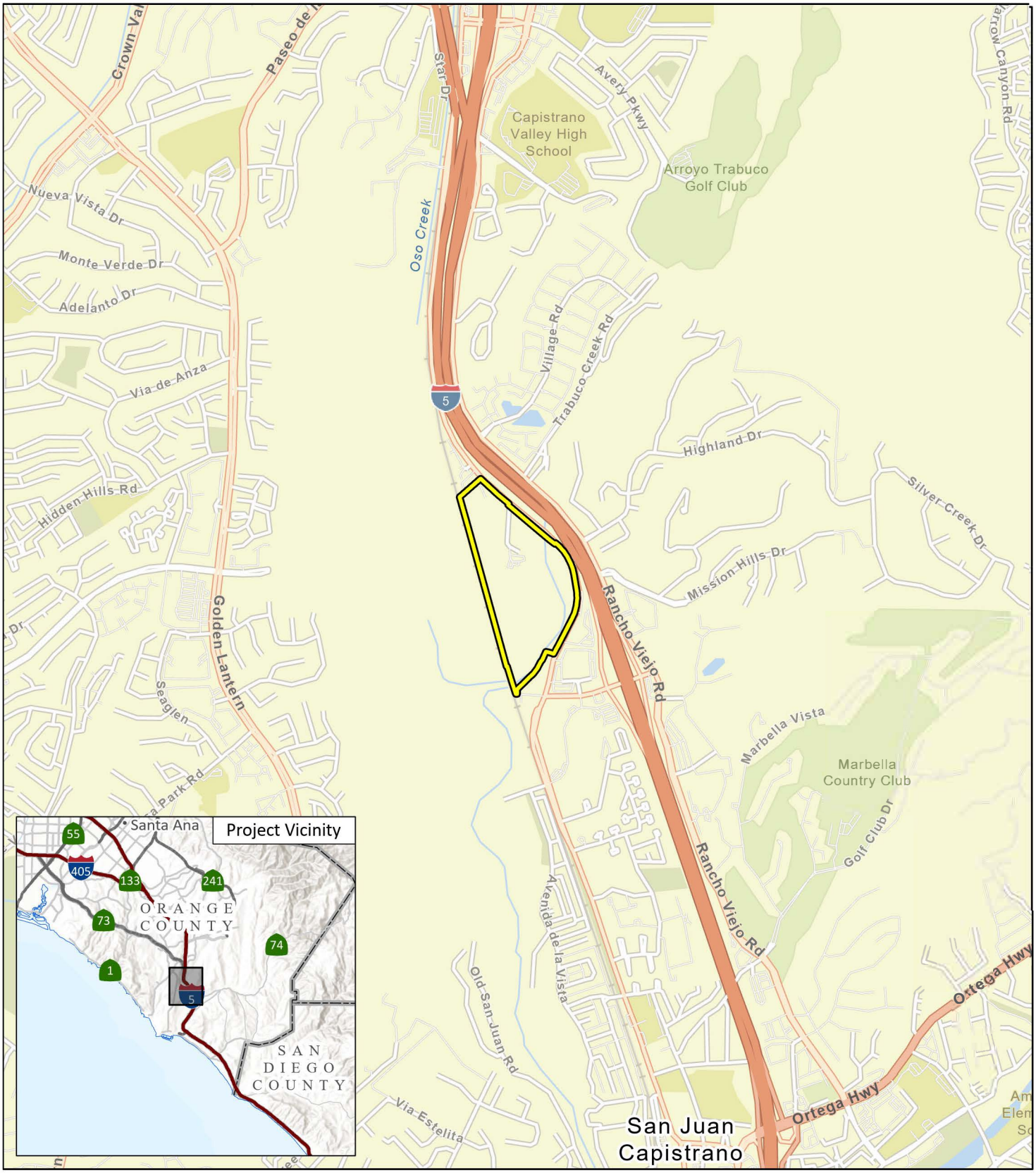
3.1.1 Project Location

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the NWOS Specific Plan Area in San Juan Capistrano, Orange County. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, The Groves Apartments (senior living residential community) to the south, and an Orange County Transportation Authority (OCTA)-owned rail line to the west used by Metrolink commuter rail and Amtrak's Pacific Surfliner route. Regional access is provided by Interstate 5 (I-5) east of the site, with direct access via Camino Capistrano, a Secondary Arterial roadway per the City's General Plan. **Figure 3-1: Regional Location and Project Vicinity** depicts the project site's location within the region.

3.1.2 Site Characteristics and Current Site Conditions

The irregularly shaped project site is currently developed with the historic Roger Y. Williams/ Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site, and an existing pump house is located adjacent to the Putuidem Village and associated parking area. Trabuco Creek and the Trabuco Creek Trail traverse the project urban conservation easements. Vegetation includes grasses, shrubs, and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek. In addition, there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site.

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FIGURE 3-1

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SOURCE: Esri (2025)

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Legacy Ranch Project

Project Location and Regional Vicinity

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3.1.2.1 Swanner House

In 1913, Judge Roger Y. Williams and his brother William Williams acquired 347 acres in north San Juan Capistrano from Judge Richard Egan, where they farmed walnuts. A 35-acre parcel was subdivided from the Williams property in 1923, and Roger Williams and his wife Lizzie Swanner Williams built the Swanner House. The Swanner House is a two-story Craftsman-style farmhouse with a matching garage and water tower that provides an example of early-20th-century ranch architecture. They landscaped the grounds with walnut and fruit trees. Around this time, Roger and William Williams shifted their focus from walnuts to citrus on the rest of the property and their orchards were credited with kicking off the City's citrus boom in the 1930s and 1940s.[1]

In 1992, the Williams/Swanner family descendants sold the home and several acres to the City as part of a 42-acre open space acquisition. The City explored various uses for the home, including use as rental housing, a museum, park ranger quarters, or an event venue. Beginning in 2010, the City began converting it into a public event space. The Swanner House now serves as a 2.5-acre event venue for weddings, fundraisers, mixers, and cultural gatherings. Features include citrus groves, bocce courts, a large oak tree, bridal suites, a grooms lounge, a barn bar, and a courtyard. [2] The Swanner House was listed on the National Register of Historic Places (NRHP) in January 2007 for its association with the development of citrus and walnut agriculture in San Juan Capistrano and as an excellent example of Craftsman-style architecture.

3.1.2.2 Putuidem Village

Putuidem ("Putuidem" meaning "belly" or "the navel") was an important village of the Acjachemen people for thousands of years. The village acted as a central hub, holding great cultural and spiritual importance and influencing the development of other nearby settlements. The establishment of the nearby Mission San Juan Capistrano in 1776 dramatically affected Putuidem, resulting in a steep population decline due to enslavement, starvation, and disease.

Following the Mission Era, much of the village site was built over. The 2003 development of the JSerra Catholic High School, located across Camino Capistrano from the southern end of the project site, unearthed many human remains and artifacts. In December 2021, the City opened an approximately 1.5-acre cultural park including the replica village within the project site to honor Putuidem's legacy. The replica village features a traditional amphitheater with stone and log seating, replica kiicha dwellings with interpretive displays, and a "Mother Tree" canopy for ceremonies and education. The park serves dual functions as a venue for tribal ceremonies and private prayer days and a public educational resource to teach local history and Acjachemen traditions. Putuidem Village is listed on California's Native American Heritage Commission (NAHC) Sacred Lands File (SLF) and has been determined eligible for listing in the NRHP as a Traditional Cultural Property (TCP) due to its significance in the historic and ongoing cultural practices of the Acjachemen people, including ceremonies, storytelling, and communal gatherings, and its direct association with living tribal

[1] The Swanner House. n.d. The Historic Swanner House. <https://swannerhouse.com/about> (accessed June 2025).

[2] Ibid.

groups. TCPs are places "associated with cultural practices or beliefs of a living community" that are integral to their identity and rooted in history.[3]

3.1.3 Regulatory Setting

The project site is zoned Specific Plan/Precise Plan, governed by the NWOS Specific Plan (SP) 2020-01, and is designated for Community Park land use in the City's General Plan. This designation supports major active recreation sites which serve a larger population and geographic area.[4] The NWOS SP 2020-01, adopted October 2020, established the development standards and the currently permitted uses for the project site including farming, orchards, dog parks, picnic areas, multi-use trails, restroom facilities, equestrian facilities, maintenance facilities, habitat conservation areas, the Putuidem Village and related events, and Swanner House event facilities. Wedding venues and the sale and service of alcohol is permitted at the Swanner House; however, wineries, wedding venues, and the sale and service of alcohol elsewhere within the NWOS SP area require a conditional use permit.

3.1.4 Surrounding Land Uses

As described above, the project site is bounded by eight single-family residential units to the north, Camino Capistrano to the east, multi-family residential (The Groves Apartments) to the south, and an OCTA-owned rail line to the west. West of I-5 and east of Camino Capistrano bounding the project site are a Christmas tree farm and farmer's market, healthcare facilities (Camino Health Center and Kaiser Permanente), JSerra Catholic High School, and two gas stations with convenience markets. Further south of the site is an assisted living community (Silverado San Juan Capistrano Memory Care). The east side of the I-5 freeway east of the project site is predominantly single-family residential uses, with office commercial uses generally southeast of the site, and a firewood retail use directly east of the Swanner House. Undeveloped open space lies west of the site, beyond which are single-family residential use in the City of Laguna Niguel.

Table 3.A: Surrounding Land Uses and Setting summarizes existing land use, General Plan land use, and zoning for the project site and the surrounding areas. **Figure 3-2: Aerial Photograph of the Project Site and Surrounding Land Uses** depicts the project site and land use in the surrounding areas.

[3] California Cultural Resources Preservation Alliance Inc. Putiidhem. <https://ccrpa.net/putiidhem> (accessed June 2025).

[4] City of San Juan Capistrano. 2002. San Juan Capistrano General Plan, Land Use Element. May 7.



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FIGURE 3-2

SOURCE: Google Imagery (2025)

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Legacy Ranch Project

Aerial Photograph of the Project Site and Surrounding Land Uses

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Table 3.A: Surrounding Land Uses and Setting

Direction	Existing Land Use	General Plan Designation	Zoning District
Project Site	Open space, Roger Y. Williams/Swanner House, the Dr. Joe Cortese public dog park, and the Village of Putuidem	Community Park (CP)	Specific Plan/Precise Plan (NWOS Specific Plan)
North	Single-family residential	Medium Low Density (MLD)	Single-Family-10,000 District (RS-10,000)
	Undeveloped, vacant	General Open Space (GOS)	General Open Space (GOS)
	Single-family residential	Medium High Density (MHD)	Single-Family-4,000 District (RS-4,000)
			Planned Community District (PC)
East	Undeveloped, vacant	General Open Space (GOS)	General Open Space (GOS)
	Single-family residential	Low Density (LD)	Single-Family-10,000 District (RS-10,000)
		Very Low Density (VLD)	Hillside Residential District (HR)
	Christmas tree farm	General Open Space (GOS)	General Open Space (GOS)
West	Open space	General Open Space (GOS)	General Open Space (GOS)
		Special Study (SPS)	Agri-Business District (A)
South	Multi-family residential	Very High Density (VHD)	Very High Density (VHD)
	School	Office/Research Park (O/RP)	Office Commercial District (OC)
	Assisted living community	Assisted Care Facilities (ACF)	Public and Institutional District (P&I)

Sources: San Juan Capistrano General Plan Land Use Map (City of San Juan Capistrano, May 7, 2002).
City of San Juan Capistrano Zoning Map (City of San Juan Capistrano, November 15, 2002).

3.2 PROJECT OBJECTIVES

The purpose of the proposed project is to transform underutilized City-owned land into a vibrant, multi-functional community hub that honors and enhances San Juan Capistrano's rich equestrian and agricultural heritage. By creating a welcoming space that includes event venues, equestrian facilities, farming, and educational programming, the proposed project intends to foster a strong sense of community, provide opportunities for residents and visitors to engage with nature and the City's historical roots, and celebrate the unique character of the local equestrian culture. The proposed project would activate the property, offering inclusive spaces for special events, community gatherings, and hands-on learning experiences, thereby enriching the social, cultural, and recreational life of San Juan Capistrano.

The primary objectives of the proposed project are as follows:

1. Develop a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities.

2. Preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance.

3. Promote sustainable agricultural practices through orchards, row crops, and farm-related educational programs.

4. Provide diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors.

5. Enhance connectivity through trails and pedestrian infrastructure, integrating with the existing Trabuco Creek Trail.

6. Support local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment.

7. Ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant.

3.3 PROJECT BACKGROUND

The project site, originally part of a 347-acre walnut and citrus orchard purchased by Judge Roger Y. Williams and his brother William in 1913was subdivided in 1923 to build the Swanner House. The City acquired the 65.5-acre project site in 1992, and orchard operations ceased. Since the City's acquisition, a small portion of the project site has provided passive recreational activities through equestrian and hiking trails; however, the majority of the project site has not been utilized for recreational opportunities by local residents. In 2017, the City began seeking proactive stewardship of the existing facilities (Swanner House and Dr. Joe Cortese Dog Park) while exploring the development of the remaining area with new amenities to increase the property's appeal and provide recreational opportunities and use of the property.

In 2019, the City conducted a public survey as part of outreach efforts to identify the types of features and/or amenities the community would like to see on the project site. A total of 495 residents responded to the survey. The results indicated that the majority of people who responded preferred the property be developed with walking and/or nature trails, natural open space, and the "Putuidem Village" Community Park Project. In December 2021, the City formally opened the Putuidem Village Park on the project site to honor Putuidem's legacy.

On March 1, 2022, the City Council authorized the release of a Request for Proposals (RFP) to explore long-term uses for the project site. On May 17, 2022, the City Council and community members heard presentations from three selected groups, including Legacy Ranch Partners, LLC, detailing their proposals, relevant experience, and qualifications for developing the site. The proposal submitted by Legacy Ranch Partners, LLC, integrated all the top four requested recreational activities listed in the City's 2019 NWOS Recreational Survey and introduced additional uses and amenities to maximize the project site's appeal, not previously considered during the adoption of NWOS Specific Plan No. 2020-01.

3.4 PROPOSED PROJECT

3.4.1 Overall Development Concept

The proposed project would develop the Legacy Ranch within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, California. The Legacy Ranch would consist of several different land uses arranged in seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core. Each core would incorporate community amenities, as described in more detail below.

Changes to permitted uses currently identified in the NWOS Specific Plan would include the following:

- Adding religious gatherings and removing caretaker quarters to the list of permitted events/uses at the Swanner House.

In addition to the permitted uses currently identified in the NWOS Specific Plan the following proposed uses would be added as permitted uses:

- Farming-related retail stands and educational tours; and
- Passive recreation amenities.

Changes to the conditionally permitted uses currently identified in the NWOS Specific Plan would include the following:

- Changing the current conditionally permitted use pertaining to wedding venues to include all events venues, in addition to the Swanner House; and
- Changing the current conditionally permitted use to allow the sale and service of alcohol not involving the Swanner House.

In addition to the conditionally permitted uses currently identified in the NWOS Specific Plan the following proposed conditionally permitted uses would be added as conditionally permitted uses:

- Eating and Drinking Establishments; and
- Group, social, public and private event activities with 499 or fewer participants so long as the use does not restrict public access to the public trails, dog park, and Putuidem Village. Events may include ancillary services such as shuttle services, bus and trailer parking, food and beverage services, and amplified sound.

The following uses would be added as accessory uses to permitted or conditionally permitted uses:

- A maximum of four Caretakers Residences; and
- Offices.

In addition, the NWOS Specific Plan includes clarification that the allowed uses for the portion of the NWOS Specific Plan area owned by Orange County Flood Control District (OCFCD) shall be governed by its General Plan land use designation of Community Park (CP) and General Open Space (GOS).

The proposed project also includes an Amendment to the NWOS Specific Plan to allow for development of the Legacy Ranch on the project site. The amended NWOS Specific Plan would add the new land uses and activities identified above as permitted, conditionally permitted, and accessory uses of the NWOS Specific Plan.

In addition, the proposed project is pursuing a Conditional Use Permit (CUP) for use of the project site as a venue for group activities and community events, such as organized gatherings with a shared purpose (e.g., recreational, educational, cultural, or social), occurring between 8:00 a.m. and 11:00 p.m. The CUP would also allow food and beverage services, including the service of alcoholic beverages in full compliance with all applicable permits and regulations of the California Department of Alcoholic Beverage Control (ABC) and the use of amplified sound equipment, provided it does not exceed the noise limits established in the City of San Juan Capistrano's Noise Ordinance. The CUP would permit a maximum of 499 combined on-site guests and participants at any one time, inclusive of individuals attending events at the Swanner House.

The proposed project would also amend the development standards of the NWOS Specific Plan, including reducing the required setback from the railroad track from 50 feet to 20 feet, removing the required internal setbacks from the Swanner House and Dr. Joe Cortese Dog Park, reducing the required setback from the existing trails from 25 feet to five feet, and changing the Trabuco Creek setback to be 100 feet from the conservation covenant boundary instead of the creek edge. In addition, the following structures are permitted to be constructed within the required setbacks:

- Playgrounds;
- Public restrooms up to 1,500 square feet;
- Signage; and
- Shade structures with no more than 50 percent enclosed walls, 18 feet tall, and up to 500-square-foot setbacks may be reduced to 5 feet.

The proposed project also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The proposed project would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village. Opening year for the proposed project is anticipated to be 2032. **Figure 3-3: Conceptual Site Plan** depicts the overall development concept for the project site, **Figure 3-4: Cores Master Plan**, depicts the seven proposed cores on the project site, and **Figure 3-5: Proposed Amenities** depicts the proposed amenities within each core.



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FIGURE 3-3

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SOURCE: Almquist 2025

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Legacy Ranch Project
Conceptual Site Plan

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FIGURE 3-4

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SOURCE: Almquist 2025

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Legacy Ranch Project
Cores Master Plan

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FIGURE 3-5

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SOURCE: Almquist 2025

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Legacy Ranch Project
Proposed Amenities

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The City would continue to own the project site (i.e., NWOS area) and would lease it to the project Applicant, who would operate the project site as the Legacy Ranch. During operations, including during large events such as weddings or equestrian events, the general public would continue to have open access to the entire project site as it does under existing conditions.

3.4.1.1 Equestrian Core

As shown in **Figures 3-4** and **3-5**, the Equestrian Core would be located in the center of the project site and consist of the following amenities:

- two main, approximately 17,600-square-foot horse barns containing a total of 149 horse stalls for full time boarding (up to 29 roping cattle could also be accommodated in place of horses);
- an approximately 4,320-square-foot covered ancillary operational barn that may include a covered wash station;
- an additional approximately 4,320-square-foot ancillary veterinary and operational barn;
- two riding pens;
- approximately 55,000 square feet dedicated to a covered riding/roping arena and may include a sorting pen, feed hall, and maintenance shop;
- an approximately 33,600-square-foot warm-up arena;
- an approximately 2,300-square-foot equestrian caretaker residence;
- equestrian trailer parking and loading area;
- a stage; and
- temporary or permanent stands accommodating a maximum capacity of 1,200 spectators on a regular basis and occasionally up to a maximum capacity of 2,500 spectators.

In addition, southwest of the main equestrian facility, the Equestrian Core would include an approximately 6,000-square-foot barn for use by equine therapy programs provided by Otra Mas Horse Rescue and Equine Assisted Therapy (Otra Mas). Otra Mas is a non-profit organization in San Juan Capistrano that provides mental health and wellness programs and equine therapy for groups and individuals.

The Equestrian Core would also include 365 standard and 20 truck and trailer parking spaces along the proposed access roads and meadow areas that could be used for temporary parking during a large equestrian event.

3.4.1.2 Chapel Core

As shown in **Figures 3-4** and **3-5**, the Chapel Core would be located northwest of the Equestrian Core and consists of an approximately 3,000-square-foot chapel and associated parking area containing 49 standard parking spaces. The chapel would provide a wedding venue at the project site in addition to the Swanner House. The Chapel Core would also include an approximately 6,300-square-foot ranch house for dining and special activities, an approximately 1,000-square-foot shared restroom building for both the chapel and ranch house, and a shared event lawn and shade structures.

3.4.1.3 Swanner House Core

The Swanner House Core is centered around the existing historic Swanner House, as shown in **Figure 3-4**. As previously discussed, the proposed project would preserve the historic Swanner House, including the associated event space, lawn, and parking area containing 46 standard parking spaces.

3.4.1.4 Agricultural Core

As shown in **Figures 3-4** and **3-5**, the Agricultural Core would be located at the northern end of the project site and consist of an orchard, row crops, windrow (trees), an approximately 3,000-square-foot agricultural barn, and an approximately 6,000-square-foot catering facility. During events, the catering facility would operate from 6:00 a.m. to 11:00 p.m. The Agricultural Core would also include 20 standard parking spaces.

3.4.1.5 Event Barn Core

The Event Barn Core would be located within the Equestrian Core, south of the arenas, as shown in **Figure 3-4**. As shown in **Figure 3-5**, the Event Barn Core would consist of two, approximately 3,600-square-foot event barns. Each event barn would include patio space, event space, and associated parking area containing 55 standard parking spaces. The Event Barn Core would facilitate events at the project site, including weddings.

3.4.1.6 Community Building Core

As shown in **Figure 3-4**, the Community Building Core would be located east of Trabuco Creek and would be accessed by the new driveway from Camino Capistrano and a pedestrian bridge over Trabuco Creek that connects to the Trails and Natural Core. As shown in **Figure 3-5**, the Community Building Core would consist of an approximately 10,000-square-foot community building and a parking area south of the proposed Community Building. The parking area would include a total of 85 standard parking spaces. In order to construct the proposed improvements within the Community Building Core, the existing approximately 1,600 square-foot barn would be demolished.

3.4.1.7 Trails and Natural Core

As shown in **Figures 3-4** and **3-5**, the Trails and Natural Core would be located between Trabuco Creek and the Equestrian Core and would consist of a native garden area, a program area, several picnic areas, and an overlook deck. The Trails and Natural Core would include the development of a pedestrian bridge across Trabuco Creek, connecting to the Community Building Core. As the proposed pedestrian bridge would be located over Trabuco Creek, which is mapped as a Regulatory

Floodway,[5] construction of the proposed pedestrian bridge would be coordinated with applicable agencies, including the Federal Emergency Management Agency (FEMA) and the OCFCD.

As shown in **Figure 3-5**, the Trails and Natural Core would include new trails that would connect the various Legacy Ranch facilities across the project site, including the Swanner House, Dr. Joe Cortese Dog Park, and the Putuidem Village. The new trail network would also include connections to the existing trail system.

3.4.2 Access, Circulation, and Parking

As shown in **Figure 3-6: Proposed Circulation Plan**, access to the Legacy Ranch would be provided by two ingress/egress driveways from Camino Capistrano, including the existing access driveway south of the Swanner House and one proposed driveway that would provide access to the Community Building Core and entry road parking area. In addition, as shown in **Figure 3-4**, new internal asphalt roads would be constructed to provide access to the proposed parking areas within the Equestrian, Chapel, and Event Barn Cores.

Overall, the proposed project would provide a total of approximately 802 dedicated parking spaces throughout the proposed cores, including the 20 truck and trailer parking spaces within the proposed Equestrian Core. Additional temporary parking spaces could be provided by utilizing other areas throughout the project site. Areas that would accommodate temporary parking include the meadows immediately adjacent to the arenas and the stage in the Equestrian Core as well as areas adjacent to the event barns in the Event Barn Core and Equestrian Core. The precise location of temporary parking would be determined as part of logistical planning for each event, and could include the use of valet parking services.

As described above, the proposed project would also include a pedestrian bridge over Trabuco Creek that would connect the Community Building Core to the rest of the Legacy Ranch, internal decomposed granite roads, pedestrian paths, and new trail connections to the Trabuco Creek Trail throughout the project site. **Figure 3-6** depicts the proposed Legacy Ranch trail system, including trail connections to existing trails within the project site and in the immediate surrounding area.

[5] Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map (FIRM) No. 06059C0443J. December 3.

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FIGURE 3-6

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SOURCE: Almquist 2025
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Legacy Ranch Project
Proposed Circulation Plan

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3.4.3 Landscaping and Open Space

The proposed project would include active and passive recreational facilities and extensive open space. Some existing trees and vegetation on the project site would be maintained and the proposed project would include new landscaping throughout the project site. If present on the project site, existing trees that meet the criteria for designation as a Heritage Tree[6] would be integrated into the landscape plan for the proposed project. In addition, the removal of any existing mature tree (i.e., a tree with a trunk diameter of six inches or more measured at three feet above grade) would require a Tree Removal Permit pursuant to Section 9-3.557 of the City's Municipal Code. Tree removal would meet the City's Tree Removal Permit requirements and conditions, including those related to the replacement of a mature tree.

In addition, the approximately 14-acre existing conservation covenant encompassing Trabuco Creek and both its banks would be untouched. Development of proposed structures would be set back from the covenant boundary by an approximately 100-foot buffer, consistent with the NWOS Specific Plan Development Standards. Although the proposed pedestrian bridge over Trabuco Creek itself would traverse the 100-foot buffer and the Trabuco Creek conservation covenant, the footings for the proposed bridge are planned to be located outside of the jurisdictional boundary of the creek area.

3.4.4 Lighting

The proposed project would include on-site lighting for visibility and safety. All lighting would adhere to the City's Lighting Standards as provided in Chapter 9 of the City's Municipal Code and would be generally shielded to prevent light emissions from spilling onto adjacent properties and the adjacent conservation covenant area encompassing Trabuco Creek. In addition, the proposed project would comply with the requirements of the State Energy Code (Title 24, Part 6) and would include preparation of a photometric study as part of the conditions of approval.

3.4.5 Utilities and Infrastructure

The project site is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunications infrastructure; however, it is expected that these utilities would need to be expanded and/or upgraded to accommodate the various land uses included in the proposed project.

Water service for the proposed project would be provided by Santa Margarita Water District (SMWD) via an existing water service line located in Camino Capistrano. Wastewater service would be provided by SMWD via an existing 8-inch sewer main that is connected to the Moulton Niguel Water District (MNWD) 12-inch trunk line located adjacent to the OCTA-owned rail line. The existing 8-inch sewer line was installed in 2015 to serve the Swanner House and restrooms at the project site when the City and MNWD entered into an agreement for the capacity discharge from the Swanner

[6] In the City, a tree is considered a heritage tree when the tree has a trunk diameter at breast height (dbh) of 36 inches or greater, and is a specimen of one of the following species: *Schinus molle* (California pepper); *Quercus* spp. (oak); *Cedar* spp. (cedar); *Eucalyptus globulus* (blue gum eucalyptus); *Juglans* spp. (walnut); *Olea europaea* (olive); *Platanus* spp. (sycamore); or *Populus* spp. (cottonwood).

House and two future restrooms. As the SMWD annexed the City's water utilities system into its service area in 2021, this agreement would require amendment to identify SMWD as the sole wastewater service provider. Electricity and natural gas would continue to be supplied by San Diego Gas & Electric Company (SDG&E) and the Southern California Gas Company (SoCalGas), respectively, via extensions from existing electrical and natural gas transmission lines in the vicinity of the project site. Solar panels would be included in the design of the proposed equestrian arena in the Equestrian Core. The City also maintains storm drainage collection and conveyance facilities in the vicinity of the project site and regional flood control facilities in the area are maintained both by the City and the OCFCD. Two creeks traverse to the west (Oso Creek) and east (Trabuco Creek) of the project site and natural drainage at the project site is generally toward the southeast, conforming to the natural topography.

As previously discussed, there are three wells located on the project site. The northernmost well, located adjacent to the railroad tracks east of the Agricultural Core would be preserved. The existing access easement would also be preserved. The central well, located between the Equestrian Core and the Putuidem Village, would be integrated into the landscape plan as part of the proposed project. A future access easement would be incorporated into the circulation design for the proposed project in order to allow continued access to the northernmost well by the SMWD. The southernmost well, located in the Equestrian Core, would be abandoned and plugged as part of the proposed project.

3.4.6 Demolition and Construction

Construction of the proposed project would include the demolition of the existing 1,600 square-foot barn in the Community Building Core, site preparation, installation of utilities, paving, building construction, landscaping, and architectural coating activities. The proposed project would also abandon and plug the southernmost well on the project site in accordance with all applicable regulations. It is anticipated that the maximum depth of excavation for the proposed project would be approximately eight feet. In addition, it is anticipated that the project site would be balanced, and no import or export of soil would be required.

Construction of all proposed project phases is anticipated to be completed over approximately three years, beginning within three years of the Certification of the EIR (i.e., 2029). Construction activities are anticipated between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and 8:30 a.m. and 4:30 p.m. on Saturday, consistent with the City's General Plan Noise Element and Section 9-3.531 of the City's Municipal Code (Noise Ordinance).

3.5 PROJECT APPROVALS

While the City is the CEQA Lead Agency for the proposed project, other agencies also have discretionary authority related to the project or serve as a responsible and/or trustee agency in connection with the proposed project. A list of these agencies and potential permits and approvals that may be required is provided in **Table 3.B: Potential Permits and Approvals.**

Table 3.B: Potential Permits and Approvals

Lead Agency	Permits/Approvals
City of San Juan Capistrano	● Approval of Amendment to the Northwest Open Space (NWOS) Specific Plan ● Environmental Review ● Tree Removal Permit ● Conditional Use Permit (CUP) for use of the project site as a venue for group activities and community events
Other Agencies/Entities	
San Diego Regional Water Quality Control Board (RWQCB)	● National Pollutant Discharge Elimination System (NPDES) Permit ● Section 401 Water Quality Certification
U.S. Army Corps of Engineers (USACE)	● Section 404 permit
Federal Emergency Management Agency (FEMA)	● Encroachment Permit
Orange County Flood Control District (OCFCD)	● Encroachment Permit
U.S. Fish and Wildlife Service (USFWS)	● Incidental Take Permit for Coastal Sage Scrub
California Department of Fish and Wildlife (CDFW)	● Section 1602 Streambed Alteration Agreement
California Department of Alcoholic Beverage Control (ABC)	● On-site alcohol sales permit
Santa Margarita Water District (SMWD)	● Encroachment Permit ● Water and Sewer Connections
Moulton Niguel Water District (MNWD)	● Amendment to agreement between the City and the MNWD for wastewater service

Source: Compiled by LSA (2026).

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4.0 SETTING, IMPACTS, AND MITIGATION MEASURES

This chapter contains an analysis of each potentially significant environmental impact that has been identified for the proposed Legacy Ranch Project (proposed project). The following discussion describes: (1) how a determination of significance is made; (2) the environmental issues addressed in this chapter; (3) the context for the evaluation of cumulative effects; (4) the format of the topical issue sections; and (5) an evaluation of the project's environmental impacts in Sections 4.1 through 4.13.

DETERMINATION OF SIGNIFICANCE

The California Environmental Quality Act (CEQA) defines a significant effect as a substantial, or potentially substantial, adverse change in the environment.[1] The "environment" means the physical conditions existing in the area, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Each impact evaluation in this chapter is prefaced by criteria of significance, which are the thresholds for determining whether an impact is significant. These criteria of significance are based on the *State CEQA Guidelines* and applicable City of San Juan Capistrano (City) policies.

In determining whether a project's impacts are significant, an Environmental Impact Report (EIR) ordinarily compares environmental conditions under the proposed project to existing environmental conditions, which are referred as the "baseline" for purposes of the impact analysis. The baseline most commonly used is based on environmental conditions in existence at the time that the Notice of Preparation (NOP) and Initial Study were published, which for the proposed project was November 2025.

In determining the significance of potential environmental impacts compared to baseline conditions, regulatory compliance measures requiring compliance with existing regulatory requirements are first applied. The regulatory compliance measures are required regulatory requirements applicable to development projects throughout the City and are implemented to reduce or avoid potential environmental effects.

ISSUES ADDRESSED IN THIS DRAFT EIR

Sections 4.1 through 4.13 of this chapter describe the environmental setting of the project as evaluated in this Draft EIR and the impacts that are expected to result from implementation of the proposed project. Mitigation measures are proposed to reduce potential impacts, where appropriate. The following environmental issues are addressed in this chapter:

[1] California Public Resources Code Section 21068 (2022).

- 4.1: Aesthetics
- 4.2: Air Quality
- 4.3: Biological Resources
- 4.4: Cultural Resources
- 4.5: Energy
- 4.6: Geology and Soils
- 4.7: Greenhouse Gas Emissions
- 4.8: Hazards and Hazardous Materials
- 4.9: Hydrology and Water Quality
- 4.10: Noise
- 4.11: Transportation
- 4.12: Tribal Cultural Resources
- 4.13: Utilities and Service Systems

Preliminary analysis provided in the Initial Study (**Appendix B**) determined that development of the proposed project would not result in significant impacts to the following environmental topics: Agriculture and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire. Consequently, these issues are not examined in this Draft EIR and are briefly addressed in Chapter 6.0, Other CEQA Considerations. Although the project Applicant revised the proposed project to remove the Farm Stay Core and expand the Equestrian and Natural Cores after preparation of the Initial Study, the revisions to the proposed project would not change the conclusions of the Initial Study as the removal of the Farm Stay Core represents an overall reduction in development and the overall intensity of proposed uses at the project site.

Consistency with the City's land use and planning policies, including the General Plan and the Zoning Ordinance, are discussed in Section 3.11, Land Use and Planning, of the Initial Study (**Appendix B**). It should be noted that, according to CEQA, policy conflicts do not, in and of themselves, constitute a significant environmental impact. Policy conflicts are considered to be environmental impacts only when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. Any such associated physical environmental impacts are discussed in the Initial Study or appropriate sections of this Draft EIR. Zoning compliance and other policy considerations will be further evaluated by City decision-makers when considering approval of the proposed project.

CUMULATIVE ANALYSIS CONTEXT

Section 15355 of the *State CEQA Guidelines* defines "cumulative impacts" as "two or more individual effects which, when considered together, are considerable, or which can compound to increase other environmental impacts." Section 15130 of the *State CEQA Guidelines* requires that an EIR evaluate potential environmental impacts when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. These impacts can result from a combination of the proposed project together with other projects causing related impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The cumulative impacts discussions in Sections 4.1 through 4.13 explain the geographic scope of the area affected by each cumulative effect (e.g., immediate project vicinity, citywide, and regional). The geographic area considered for each cumulative impact depends upon the impact that is being

analyzed. CEQA requires that cumulative impacts be discussed using either a list of past, present, and probable future projects producing related or cumulative impacts, or a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, which describes or evaluates conditions contributing to the cumulative effect. This analysis employs both the list-based and projections-based approaches as further described in the cumulative impacts discussion in each of the subsequent sections in this chapter of the EIR.

The cumulative context for land use development project effects is typically localized, within the immediate vicinity of the project site, or at the neighborhood level. **Table 4.A: Cumulative Projects** below, identifies the cumulative projects considered in this Draft EIR.

Table 4.A: Cumulative Projects

Project No.	Project Name	Project Location	Land Use	Description
01	CalTrout Trabuco Creek Fish Ladder	Trabuco Creek in NWOS	Natural Resources/ Conservation Infrastructure	Construction of engineered hydraulic fishway structures and channel improvements within Trabuco Creek in order to restore aquatic connectivity and remediate fish-passage barriers.
02	J. Serra Catholic High School	North and south of J. Serra Road, west of I-5	Institutional (school)	Expansion of the existing private high school to accommodate up to 2,000 new students.
03	Distrito La Novia	North of La Novia Avenue and east of Valle Road	Industrial and Residential	Construction of up to 96 residential units and 65,000 square feet of quasi-industrial uses.
04	San Juan Meadows	South of La Novia Avenue and east of Valle Road	Equestrian and Residential	Construction of up to 94 single-family detached residential lots and an equestrian center for up to 500 horses.
05	The River Street Project	North of Del Obispo Street on Paseo Adelanto through to Los Rios	Commercial	Construction of 56,067 square feet of new commercial uses.
06	The Farm on Del Obispo	32382 Del Obispo	Residential	Construction of 169 new residential units.
07	Petra Avelina	Terminus of Callee Arroyo	Residential	Construction of up to 132 new residential units, including townhome and detached single-family residential units.
08	Mission Place	26874 Old Mission Road	Retail/Restaurant and Office	Construction of 14,977 square feet of retail/restaurant space and 12,480 square feet of office uses.
09	In N Out	31791 Del Obispo Street	Restaurant	Construction of a 3,879-square-foot sit-down and drive-through restaurant.
10	City Hall/Affordable Housing	32400 Paseo Adelanto	Residential and Municipal Office	Construction of 50 multi-family residential uses and the expansion of City Hall to provide an additional 16,021 square feet of municipal office uses.

Table 4.A: Cumulative Projects

Project No.	Project Name	Project Location	Land Use	Description
11	Swallows Creek	30700 Rancho Viejo Road	Industrial	Construction of 136,308 square feet of industrial uses.
12	St. John Church	29742 Rosenbaum Road	Religious	Construction of an additional 21,358 square feet of religious space at St. John Church.
13	French Hotel	31861-31871 Camino Capistrano	Hotel	Development of a 70-room boutique hotel, including the restoration and rehabilitation of the Domingo Yorba and Casa Manual Garcia Adobes for guest rooms and dining, an event space, on-site valet parking, and related amenities.
14	Capistrano Business Park	27122, 27124, 27126, 27128, 27130 27132, 27134, & 27136 Paseo Espada and 27121, 27123, 27125, 17127, 27129, & 27131 Calle Arroyo	Residential	Creation of a new Specific Plan area, which would facilitate construction of up to 200 single-family residential units and 50 multi-family residential uses on 15-acre previously zoned for industrial uses.
15	Camino Twelve	25642 Camino Del Avion	Residential	Construction of 12 residential uses on approximately 0.61-acre of the land.
16	Performing Arts Center	31872 El Camino Real	Commercial	Construction of a new approximately 49,000-square-foot performing arts center.
17	Forster Mixed Use Project	31878 El Camino Real	Commercial and Residential	Construction of approximately 7,000 square feet of commercial space and up to 95 new apartment units.
18	San Juan Plaza Mixed Use Project	32211-32281 Camino Capistrano	Commercial and Residential	Construction of a mixed-use development consisting of 278 dwelling units, 14,881 square feet of neighborhood-servicing commercial, retail, and restaurant uses, and 400 on-site parking spaces.
19	Chipotle	31787 Del Obispo Street	Restaurant	Construction of a 2,592-square-foot sit-down and drive-through restaurant.
20	Los Rios Theater	26762 Verdugo Street	Entertainment Venue	Construction of a 23,930-square-foot theater for live entertainment.
21	Saint Margaret's Episcopal Student Commons	31732 Rancho Viejo Road	Institutional (school)	Construction of a 35,400-square-foot student commons area at the existing Saint Margaret's Episcopal Private School.

Source: Compiled by LSA (2025).

Refer to the appropriate discussion in each topical section for further discussion of the cumulative assumptions relevant to each topic issue. The cumulative land use assumptions also take into account growth from the proposed project in combination with impacts from projected growth within San Juan Capistrano, as forecast by the City of San Juan Capistrano General Plan.

FORMAT OF ISSUE SECTIONS

The environmental topical sections are composed of two primary parts: (1) Setting, and (2) Impacts and Mitigation Measures. The following provides an overview of the general organization and the information provided in those two parts:

- **Setting:** The Setting section for each environmental topic generally provides a description of the applicable physical setting (e.g., existing land uses, existing traffic conditions) for the project site and its surroundings in the City of San Juan Capistrano. It also provides an overview of regulatory considerations that are applicable to each specific environmental topic.

- **Impacts and Mitigation Measures:** The Impacts and Mitigation Measures section for each environmental topic presents a discussion of the potential impacts that could result from implementation of the proposed project. The section begins with the criteria of significance, which are the thresholds used to determine whether an impact is potentially significant. These thresholds are adapted from Appendix G of the *State CEQA Guidelines* and apply local and regional criteria applicable to the project area. The latter part of this section presents the potential impacts from the proposed project and mitigation measures, if necessary. The potential impacts of the proposed project are organized into separate categories based on the criteria listed in each topical section. Cumulative impacts are also addressed.

  Under each category, evidence is presented to show the cause-and-effect relationship between the proposed project and potential changes in the environment. In accordance with *State CEQA Guidelines* Section 15126.2(a), this Draft EIR is required to "identify and focus on the significant effects of the proposed project on the environment." The magnitude, duration, extent, frequency, and range or other parameters of a potential impact are ascertained to the extent feasible to determine whether impacts may be significant. In accordance with CEQA, potential project impacts, if any, are classified as follows for each of the environmental topics discussed in this Draft EIR:

  - **Significant Impact (S):** This classification refers to impacts that are identified as potentially significant because the established threshold would be exceeded with implementation of the proposed project. This determination is made prior to identification of mitigation measures.

  - **Less than Significant Impact (LTS):** Less than significant impacts are environmental impacts that have been identified but are either not potentially significant or can be feasibly mitigated to a level of insignificance. If the proposed project is approved, the decision-making body is required to make findings pursuant to *State CEQA Guidelines* Section 15091 that significant impacts have been mitigated to the extent feasible through implementation of mitigation measures, if required.

  - **Significant and Unavoidable Impact (SU):** This classification refers to impacts that are significant, cannot be mitigated with implementation of feasible mitigation measures, and that cannot be avoided with implementation of the project as proposed. If the proposed project is approved with significant and unavoidable impacts, the decision-making body is

required to adopt a statement of overriding considerations pursuant to *State CEQA Guidelines* Section 15093 explaining why the project benefits outweigh those significant and unavoidable environmental impacts.

Significant impacts are numbered and shown in bold type, and the corresponding mitigation measures are numbered and indented. Impacts and mitigation measures are numbered consecutively and begin with an acronym or abbreviated reference to the impact section (e.g., TRA for Transportation). The following symbols are used for their respective individual topics:

- AES, Aesthetics
- AIR, Air Quality
- BIO, Biological Resources
- CUL, Cultural Resources
- EN, Energy
- GEO, Geology and Soils
- GHG, Greenhouse Gas Emissions
- HAZ, Hazards and Hazardous Materials
- HYD, Hydrology and Water Quality
- NOI, Noise
- PAL, Paleontological Resources
- TRA, Transportation
- TCR, Tribal Cultural Resources
- UTL, Utilities and Service Systems
- WLD, Wildfire

4.1 AESTHETICS

This section discusses the existing aesthetic conditions on the project site and provides an analysis of the potential impacts to aesthetics associated with implementation of the proposed Legacy Ranch Project (proposed project).

4.1.1 Scoping Process

The City of San Juan Capistrano (City) received one comment during the scoping period for this Draft Environmental Impact Report (EIR) (November 14 through December 15, 2025) concerning the proposed project's potential impacts related to aesthetics, as discussed below. In addition, no comments pertaining to aesthetics were submitted during the public scoping meeting held on November 19, 2025.

- Larry Kramer, December 9, 2025, raised concerns related to light and glare from the implementation of the proposed project.

Scoping comments are provided in **Appendix A** of this Draft EIR.

4.1.2 Existing Environmental Setting

The City of San Juan Capistrano is surrounded by several prominent hillsides and ridgelines that define the city's scenic backdrop and natural character. The approximately 65.6-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, a senior living residential community (The Groves Apartments) to the south, and an Orange County Transportation Authority-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route. Undeveloped open space lies directly to the west of the project site.

The irregularly shaped project site is largely undeveloped with the exception of the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site and there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site.

Trabuco Creek and the Trabuco Creek Trail traverse the project site north to south, parallel to Camino Capistrano. Oso Creek is located west of the project site. In addition, an unnamed tributary to Trabuco Creek (Tributary 1) is located on the eastern portion of the project site, south of the existing barn and associated storage containers. Another concrete lined tributary (Tributary 2) to Trabuco Creek, lies further to the south on the project site. Vegetation includes grasses, shrubs, and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek. Approximately 14 acres of the project site, encompassing Trabuco Creek and both its banks, are subject to conservation easements. Topographically, the project site is relatively flat, situated between rolling hillsides, providing views of the surrounding hills and ridgelines.

4.1.2.1 Regional Visual Character

As noted above, the city is surrounded by several prominent hillsides and ridgelines. The City's General Plan includes policies to prevent incompatible development in areas which are identified for preservation for scenic purposes, including views to and from open spaces and the surrounding ridgelines.[1] Scenic resources in the city also consist of scenic corridors, including Interstate 5 (I-5) and the rail line, and historic districts/resources.[2]

4.1.2.2 Project Site and Vicinity

The irregularly shaped project site is bounded by single family residential uses to the north, Camino Capistrano to the east, multi-family residential uses associated with The Groves Apartments to the south, and an Orange County Transportation Authority (OCTA)-owned rail line to the west used by Metrolink commuter rail and Amtrak's Pacific Surfliner route.

The project site is located in the Northwest Open Space (NWOS) Specific Plan and offers open, natural views of the Trabuco Creek corridor, surrounding hills, and the historic Swanner House. The project site offers a mix of urban and rural views given the residential uses, undeveloped agricultural uses, and OCTA rail line in the vicinity. Additionally, the I-5 corridor is visible from portions of the project site.

Excluding the Swanner House, there are no sources of nighttime lighting present on-site. There are sources of nighttime lighting in the vicinity of the project site, including illumination from surrounding commercial, residential, and institutional development, street lighting, and vehicles on adjacent roadways, including I-5, which is an important transportation corridor through the city.

4.1.2.3 Surrounding Land Uses

The western portion of the project site and the surrounding area consists of generally undeveloped land and includes clear views of the hillsides and natural vegetation. The eastern side of the project site is developed and provides vehicular access to the area. Camino Capistrano provides semi-obstructed views of the city's hillsides and ridgelines due to the onsite vegetation and trees. The condition of the areas surrounding the project site include:

- **North:** Property north of the project site consists of eight single-family residences.
- **East:** The project site is bounded by Camino Capistrano to the east. Property east of Camino Capistrano consists of a Christmas tree farm and farmer's market, healthcare facilities (Camino Health Center and Kaiser Permanente), JSerra Catholic High School, and two gas stations with convenience markets. Further east is I-5, beyond which are areas of office and single-family residential uses.

[1] City of San Juan Capistrano. 2002. *San Juan Capistrano General Plan, Conservation and Open Space Element.* May 7, 2002.

[2] City of San Juan Capistrano. 2002. *San Juan Capistrano General Plan, Community Design Element*. May 7, 2002.

- **South:** Property south of the project site consists of multi-family residential uses (The Grove Apartments), an assisted living community (Silverado San Juan Capistrano Memory Care), and other office and commercial uses.

- **West:** The project site is bounded to the west by an OCTA rail line, beyond which lies areas of agricultural use and undeveloped open space. Further west, on the hillsides overlooking the site, are single-family residential uses within the city of Laguna Niguel.

4.1.2.4 Existing Views

The following discussion describes several views of the project site from adjacent public roadways and other vantage points. Photographs of the project site were taken to analyze the various views that currently exist and that could be affected by implementation of the proposed project. **Figure 4.1-1: View Location Map** indicates the vantage point from which each view photograph was taken. **Figures 4.1-2** through **4.1-6** include five photographs depicting views of the existing project site:

- **Figure 4.1-2: Existing Views – View 1** depicts the existing view from the OCTA-owned rail line that borders the project site to the west**.** This vantage point was selected because it represents the view of the project site for users of the open space and agricultural areas west of the project site and those traveling on Metrolink and Amtrak trains along the rail line.

  As shown on **Figure 4.1-2**, View 1 depicts undeveloped land containing some small shrubs and trees in the foreground and ridgelines associated with the foothills in the background. Distant and partially obstructed views of existing development east of Camino Capistrano and I-5 are also visible in the background.

- **Figure 4.1-3: Existing Views – View 2** depicts the existing view from the Colinas Ridge Trailhead in Laguna Niguel, facing east toward the project site. This vantage point was selected because it represents the view of the project site for single-family residential uses located on the hillsides to the west, as well as for users of the open space areas in between these areas and the project site.

  As shown on **Figure 4.1-3**, View 2 depicts existing vegetation (grass and shrubs) in the foreground, the OCTA rail line and the project site in the middle ground, and the I-5 corridor, existing development, and ridgelines associated with the foothills in the northern portion of San Juan Capistrano in the background. In addition, the Santa Ana Mountains are also visible in the distant background.

- **Figure 4.1-4: Existing Views – View 3** depicts a southwesterly view of the project site from the I-5 bridge over Trabuco Creek. This vantage point was selected because it represents a view of the project site for those traveling along I-5.

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Project Site

Photo Points

FIGURE 4.1-1

N

275 550

FEET

SOURCE: Nearmap (5/7/2025)

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Legacy Ranch Project

View Location Map

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FIGURE 4.1-2

Legacy Ranch Project

Existing Views – View 1

SOURCE: Vision Scape Imagery

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FIGURE 4.1-3

Legacy Ranch Project

Existing Views – View 2

SOURCE: Vision Scape Imagery

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FIGURE 4.1-4

Legacy Ranch Project

Existing Views – View 3

SOURCE: Vision Scape Imagery

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FIGURE 4.1-5

Legacy Ranch Project

Existing Views – View 4

SOURCE: Vision Scape Imagery

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FIGURE 4.1-6

Legacy Ranch Project

Existing Views – View 5

SOURCE: Vision Scape Imagery

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As shown on **Figure 4.1-4**, View 3 depicts the I-5 roadway in the foreground, the Camino Capistrano bridge over Trabuco Creek and electrical poles and lines along Camino Capistrano in the middle ground, and trees on the project site in the background. In addition, distant, obstructed views of the ridgelines associated with the foothills on the south side of San Juan Capistrano are visible in the background.

- **Figure 4.1-5: Existing Views – View 4** depicts a view of the project site from Camino Capistrano, facing northwest. This vantage point was selected because it represents the view of the project site for those traveling along Camino Capistrano southeast of the project site.

  As shown on **Figure 4.1-5**, View 4 depicts Camino Capistrano in the foreground, vegetation (shrubs and trees) on the project site in the middle ground, and distant views of ridgelines in the San Joaquin Hills in the background.

- **Figure 4.1-6: Existing Views – View 5** depicts a view southwest to the project site from a riding trail behind residential development northeast of the project site and I-5. This vantage point was selected because it represents the view of the project site for users of open space areas east of the project site.

  As shown on **Figure 4.1-6,** View 5 depicts vegetation in the foreground, single-family residential uses in the middle ground, and the project site and surrounding open space in the background. In addition, views of ridgelines in the San Joaquin Hills are visible in the background.

4.1.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to aesthetics that are relevant to the proposed project.

4.1.3.1 Federal Policies and Regulations

There are no federal policies or regulations related to aesthetics that apply to the proposed project.

4.1.3.2 State Policies and Regulations

Caltrans Scenic Highway Program. The California Department of Transportation (Caltrans) Scenic Highway Program protects the natural scenic beauty of the State's highways and corridors through its designated scenic highways throughout the State. Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of outstanding scenic quality, containing striking views, flora, geology, and other unique natural attributes. Other considerations given to a scenic highway designation include how much of the natural landscape a traveler may see and the extent to which visual intrusions degrade the scenic corridor.

4.1.3.3 Regional Policies and Regulations

There are no regional policies or regulations related to aesthetics that apply to the proposed project.

4.1.3.4 Local Policies and Regulations

City of San Juan Capistrano General Plan. The Land Use Element and Community Design Element of the City's General Plan contain the following goals and implementing policies related to aesthetics and visual resources that would be applicable to the proposed project:

- **Land Use Goal 2:** Control and direct future growth within the City to preserve the rural village-like character of the community.
    - **Policy 2.2:** Assure that new development is consistent and compatible with the existing character of the City.
- **Land Use Goal 7:** Enhance and maintain the character of neighborhoods.
    - **Policy 7.1:** Preserve and enhance the quality of San Juan Capistrano neighborhoods by avoiding or abating the intrusion of non-conforming buildings and uses.
    - **Policy 7.2:** Ensure that new development is compatible with the physical characteristics of its site, surrounding land uses, and available public infrastructure.
- **Community Design Goal 1:** Encourage and preserve a sense of place.
    - **Policy 1.1:** Preserve significant amounts of land and important natural features for open space.
    - **Policy 1.2:** Encourage high-quality and human scale design in development to maintain the character of the City.
- **Community Design Goal 2:** Preserve the historic character of the community.
    - **Policy 2.1:** Encourage development which complements the City's traditional, historic character through site design, architecture, and landscaping.
- **Community Design Goal 3:** Preserve and enhance natural features.
    - **Policy 3.1:** Limit development of important natural characteristics such as ridgelines, unique hillside features, and creeks.
    - **Policy 3.2:** Encourage the recreational use of natural features, such as hillsides and creeks.
    - **Policy 3.3:** Preserve and enhance scenic transportation corridors, including Interstate 5 and the railroad.
    - **Policy 3.4:** Preserve important viewsheds.

City of San Juan Capistrano Municipal Code. The City's Municipal Code includes the following regulations related to aesthetics and scenic quality.

Title 9, Zoning Code. The City of San Juan Capistrano Zoning Code, Title 9 of the Municipal Code, ensures consistency between the City's General Plan and proposed development. The Zoning Code identifies development standards for various land uses, which aim at regulating aesthetics and scenic quality.

Lighting Standards. Municipal Code Section 9-3.529 regulates lighting standards throughout the City. The purpose of the City's Lighting Standards is to maintain a small-village character while also providing for the safe movement of people and vehicles in the City. Recommended lighting levels are defined at minimum levels to allow for public safety and enhance buildings and landscaping to represent the desired atmosphere of the community.

4.1.4 Methodology

The assessment of aesthetic impacts is subjective by nature. This analysis identifies and objectively examines factors that contribute to the perception of aesthetic impacts that could be caused by the proposed project. The potential aesthetic impacts of the proposed project were assessed based on consideration of several factors, including setting, scale, mass, and proportion.

The concepts and terminology used in this analysis are described below.

- **Aesthetic Resource:** An aesthetic resource is any element, or group of elements, that is visually pleasing or interesting. A community's aesthetic resources include its natural setting, the architectural quality of its buildings, the vitality of its landscaping, and the views of these resources. The degree to which these resources are present in a community is subject to personal interpretation. However, it is possible to qualify certain resources as having aesthetic characteristics and establish general guidelines for assessing the aesthetic impacts of new development.

- **Glare:** Glare refers to a continuous or periodic intense light that may cause eye discomfort or be blinding to humans.

- **Light Source:** A light source is a device that produces illumination, including incandescent bulbs, fluorescent and neon tubes, halogen and other vapor lamps, and reflecting surfaces or refractors incorporated into a lighting fixture. Any translucent enclosure of a light source is considered to be part of the light source.

- **Sensitive View:** Sensitive views are generally those associated with designated vantage points and public recreational uses, but the term can be more broadly applied to encompass any valued public vantage point. Sensitivity level has to do with the (1) intensity of use of a visual resource, (2) visibility of the visual resource and (3) importance of the visual resource to users.

- **Vantage Point:** A vantage point is a particular point of observation.

- **Visual Character and Quality:** Visual character and quality refers to the aesthetic character or quality of a streetscape, building, group of buildings, or other man-made or natural feature that creates an overall impression of an area. For example, a pleasing streetscape with trees, and

well-kept residences and yards are resources that create a pleasing impression of an area. In general, concepts of visual character and quality can be organized around four basic elements: (1) site utilization; (2) buildings and structures; (3) landscaping; and (4) signage. Adverse effects on visual quality can include the loss of aesthetic features or the introduction of contrasting features that could contribute to a decline in overall visual character. In addition, the degree of access to a visual resource contributes to the value of that resource so that an adverse visual quality effect can also occur if access to a visual resource is restricted.

The analysis of the relevant visual impacts here focuses on changes in the visual character of the project site that would result from implementation of a proposed project. This would include the visual compatibility of onsite and adjacent uses, changes to viewpoints where visual changes would be evident. Impacts to the existing environment in and around the project site are identified by the contrast between the project site's visual setting before and after implementation of the proposed project. Although few standards exist to define perceptions of aesthetic value, the degree of visual change can be described in terms of visual contrast. To assess the impacts of the proposed project with respect to aesthetic resources, visual simulations were prepared at the five key viewpoints depicted on **Figure 4.1-1**, and for which the existing views are shown on **Figures 4.1-2** through **4.1-6**, including from the OCTA-owned rail line (View 1), Colinas Ridge Trailhead (View 2), the I-5 Corridor (View 3), Camino Capistrano (View 4), and open space to the east of the project site (View 5).

Visual changes to an existing setting could result in a positive or a negative perception of the proposed project, depending on the viewer. Viewer sensitivity reflects a combination of changes to visual quality and viewer response to those changes. Viewer sensitivity to a project varies depending on familiarity with existing views, the sense of ownership of these views, and the activities viewers perform in relationship to those views. Visual perception is the act of seeing or recognizing an object and can be affected by physical conditions such as distance and speed. As an observer's distance increases from an object, the ability to see the details of the object decreases. Similarly, as an observer's speed increases, the sharpness of lateral vision declines, and the observer tends to focus along the line of travel. Therefore, the physical location of the viewer and the duration of the view would affect viewer exposure. All of these factors potentially affect perception and reaction to visual changes.

4.1.5 Thresholds of Significance

The thresholds for aesthetic impacts used in this analysis are derived from Appendix G to the *State CEQA Guidelines*. The proposed project may be deemed to have a significant impact with respect to aesthetics if it would:

Threshold 4.1.1: Have a substantial adverse effect on a scenic vista;

Threshold 4.1.2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

Threshold 4.1.3: In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in

an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or

Threshold 4.1.4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.6 Project Impacts

As discussed in Section 3.1 of the Initial Study (**Appendix B**), the proposed project would not substantially damage scenic resources within a State Scenic Highway as no officially designated State Scenic Highways exist in the city and the project site is not visible from either State Route (SR-74) or the portion of I-5 southwest of the SR-74 interchange, which are considered Eligible State Scenic Highways (Threshold 4.1.2).

In addition, because the proposed project would be designed to be consistent with the intended use of the project site and proposed design elements would be complementary of the surrounding visual character of the area and consistent with design guidelines detailed in the NWOS Specific Plan, the proposed project would not impact the visual character or quality of the project site and its surroundings (Threshold 4.1.3).

Finally, the proposed project would comply with the Lighting Standards provided in Chapter 9 of the City's Municipal Code and the City's Outdoor Recreation Lighting Design Standards, as detailed in Table 3-27 in Section 9-3.529 of the City's Municipal Code. Therefore, the proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (Threshold 4.1.4).

As the Initial Study determined that the proposed project would not significantly impact scenic resources within a State Scenic Highway, the visual character or quality of the project site and its surroundings, nor create or serve as a new source of substantial light or glare which would adversely affect day or nighttime views in the area, these topics are not discussed further in this Draft EIR.

Threshold 4.1.1: Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact.

Discussion of Effects: The project site is currently developed with the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, and predominantly consists of open space. Trabuco Creek and the Trabuco Creek Trail traverse the project site, running parallel to Camino Capistrano. Oso Creek is located along the west of the project site. Approximately 14 acres of the project site, encompassing Trabuco Creek and both its banks, are covenanted with conservation easements. Vegetation on the project site consists of grasses, shrubs, and mature trees. In addition, the Trabuco Creek riparian corridor is densely vegetated with riparian species. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, multi-family residential uses associated with The Groves Apartments to the south, and an OCTA rail line to the east. Undeveloped agricultural and open space is located west of the project site, followed by additional single-family residential uses. Under existing conditions, the project site provides views of

the adjacent open space area and nearby ridgelines. In addition, as the project site consists of open space and historical resources, views of the project site from adjacent development can also be considered a scenic vista.

Construction. Construction activities associated with implementation of the proposed project would result in site disturbance, movement of construction equipment, import and export of materials, views of incomplete buildings, and other activities that generally contrast with the existing aesthetic character of an area. Construction activities would be visible from surrounding roadways, including I-5 and Camino Capistrano, and adjacent open space areas. Grading and construction of new buildings and installation of landscaping would be temporarily disruptive. Construction would occur over an approximately three-year period, but because of the temporary nature of construction activities, it would not substantially affect views of the project site or the surrounding area. In addition, the project site contains and is generally surrounded by existing vegetation, including mature trees, that would provide partial visual screening of construction equipment from the project site and surrounding viewpoints. This existing vegetation would remain in place during construction and would help reduce the visibility of construction equipment, grading activities, and partially completed structures from nearby open space areas and public vantage points. In addition, intervening topography and vegetation along the site perimeter would limit the number of locations from which construction activities would be visible and would soften views where visibility does occur. As a result, construction-related visual changes would be filtered and intermittent rather than fully exposed or dominant in the landscape. Therefore, because existing vegetation would continue to provide visual buffering during construction, and because construction activities would be temporary and would not remove scenic resources or permanently alter the visual setting of adjacent open space, construction impacts related to substantially effecting a scenic vista would be temporary and **less than significant**.

Operation. The following discusses the visual changes that would occur at the identified public vantage points as a result of the proposed project.

- **Figure 4.1-7: Proposed Views – View 1** depicts the view of the project site from the OCTA-owned rail line, facing east. As shown on **Figure 4.1-7,** following implementation of the proposed project, the portion of the project site visible from this vantage point would include a parking lot and new landscaping, including new trees. In addition, new buildings associated with the Equestrian Core would be visible from this vantage point. Proposed landscaping and structures would obscure views of the distant foothills, but background views of the sky would remain.

- **Figure 4.1-8: Proposed Views – View 2** depicts a view of the project site from the Colinas Ridge Trailhead, facing east. As shown on **Figure 4.1-8**, following implementation of the proposed project, the portion of the project site visible from this vantage point would include the entire proposed Legacy Ranch development, including all proposed core areas. However, the proposed development would not obscure views of the existing vegetation (shrubs) in the foreground or views of the foothills in the middle ground and distant views of the Santa Ana Mountains in the background.

- **Figure 4.1-9: Proposed Views – View 3** depicts a view of the project site from the I-5 bridge over Trabuco Creek, facing southwest. As shown on **Figure 4.1-9**, following implementation of the proposed project, the change to the view from this vantage point would be minimal and largely due to an increase in vegetation on the project site. The proposed Community Building would also be partially visible from this location. View 3 would continue to be of the I-5 roadway in the foreground, the Camino Capistrano bridge over Trabuco Creek in the middle ground, and trees in the background. In addition, distant views of ridgelines associated with the foothills in southern San Juan Capistrano are visible in the background.

- **Figure 4.1-10: Proposed Views – View 4** depicts a view of the project site from Camino Capistrano, facing northwest. As shown on **Figure 4.1-10**, following implementation of the proposed project, the portion of the project site visible from this vantage point would include the proposed parking lot within the Event Barn Core, largely obscured by new landscaping, including new trees. However, the proposed development would not obscure views of the distant San Joaquin Hills.

- **Figure 4.1-11: Proposed Views – View 5** depicts a view from a riding trail behind residential development northeast of the project site and I-5. As shown on **Figure 4.1-11**, following implementation of the proposed project, existing features like the historic Swanner House and the Dr. Joe Cortese Dog Park would still be visible; however, the portion of the project site visible from this vantage point would include new landscaping, including new trees. In addition, the proposed development would not obscure views of the vegetation in the foreground, single-family residential uses in the middle ground, or the San Joaquin Hills in the background.

As discussed above, views of the project site from the surrounding area can be considered a scenic vista. Overall, implementation of the proposed project would result in new development and landscaping at the project site, which would change views of the project site from surrounding vantage points. Based on the visual simulations prepared for the proposed project, views from the OCTA-owned rail line (View 1) and from the Colinas Ridge Trailhead (View 2) represent the greatest change in views of the project site as they would include a new parking lot, new landscaping, and new buildings associated with the proposed project. However, even these changes would not result in a substantial adverse effect on the project site as a scenic vista as the proposed project would generally maintain the project site as an open space recreational area albeit with substantially enhanced landscaping, including trees. The development proposed under the project would be similar in type and scale as the existing development on the project site, including the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, and would adhere to the design guidelines detailed in the NWOS Specific Plan and the construction of the proposed structures would be subject to the City's design review process. Specifically, proposed structures would be required to be designed in either the Rural Agrarian, Western or Early California style. Further, regardless of style, proposed structures would be required to relate to the Agrarian and Native American heritage of the NWOS area. Therefore, views of the project site, although altered, would be generally similar to existing conditions.

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FIGURE 4.1.7

Legacy Ranch Project

Proposed Views – View 1

SOURCE: Vision Scape Imagery

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FIGURE 4.1.8

Legacy Ranch Project

Proposed Views – View 2

SOURCE: Vision Scape Imagery

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FIGURE 4.1.9

Legacy Ranch Project

Proposed Views – View 3

SOURCE: Vision Scape Imagery

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FIGURE 4.1.10

Legacy Ranch Project

Proposed Views – View 4

SOURCE: Vision Scape Imagery

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FIGURE 4.1.11

Legacy Ranch Project

Proposed Views – View 5

SOURCE: Vision Scape Imagery

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Implementation of the proposed project may alter views of adjacent open space areas and surrounding ridgelines, including those associated with the local San Juan Capistrano foothills, the San Joaquin Hills, and the Santa Ana Mountains. However, although the construction of the proposed buildings and implementation of new landscaping may partially obscure these views from the project site itself and may impede views from the surrounding area, partial views of adjacent open space areas and surrounding ridgelines would still exist from nearby public access points, including I-5, Camino Capistrano, and surrounding open space areas.

Based on the analysis above, the proposed project would have a **less than significant impact** related to scenic vistas, and no mitigation is required.

4.1.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for aesthetics. The cumulative impact area for aesthetics related to the proposed project are projects located within 0.5 mile of the project site, as these projects would be collectively visible from the same public vantage points.

As provided above, the proposed project would not result in a substantial adverse change in a scenic vista because future development would be generally consistent with existing uses and surrounding development. In addition, scenic views of the surrounding open space areas and ridgelines would only be partially obscured by proposed development and would still exist from nearby public access points, including I-5, Camino Capistrano, and surrounding open space areas. Of the 21 cumulative projects provided in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures, four would be visible from the same vantage points as the proposed project: the CalTrout Trabuco Creek Fish Ladder, which would be located within the NWOS area; the JSerra Catholic High School Project, located at the existing JSerra Catholic High School campus; the Swallows Creek Project, located at 30700 Rancho Viejo Road; and the St. John Church Project, located at 29742 Rosenbaum Road.

The CalTrout Trabuco Creek Fish Ladder would construct new engineered hydraulic fishway structures and channel improvements within Trabuco Creek in order to restore aquatic connectivity and remediate fish-passage barriers and would include revegetation activities to maintain the visual character of the creek area. The JSerra Catholic High School and St. John Church Projects would expand existing facilities and uses at those sites and would result in a consistent continuation of existing development. In addition, the Swallows Creek Project, which is a new industrial development project, would be consistent with the surrounding development, including the existing industrial development to the south. Further, past, present, and future projects, including those listed above, would be required to be developed consistent with the existing design standards and development standards detailed in the appropriate city's Municipal Code, including those related to building height, landscaping coverage, setbacks, visual character, and light and glare. Therefore, through compliance with existing regulations, implementation of the proposed project in combination with past, present, and future projects would not result in significant impacts related to aesthetics. Overall, the cumulative aesthetic impacts of the proposed project and the cumulative projects would be **less than cumulatively considerable**.

4.1.8 Level of Significance Prior to Mitigation

There would be no potentially significant impacts related to aesthetics with implementation of the proposed project.

4.1.9 Regulatory Compliance Measures and Mitigation Measures

4.1.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.1.9.2 Mitigation Measures

No mitigation measures are required.

4.1.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to aesthetics, and no mitigation is required.

4.2 AIR QUALITY

This section uses methodologies and assumptions recommended in the South Coast Air Quality Management District (SCAQMD) air quality impact assessment guidelines as provided in SCAQMD California Environmental Quality Act (CEQA) guidance documents. In keeping with these guidelines, this section describes existing air quality and evaluates short-term impacts during construction, long-term emissions associated with operation, and potential human health risk that may result from implementation of the proposed Legacy Ranch Project (proposed project). Air quality modeling data are included in **Appendix C**.

4.2.1 Scoping Process

The City of San Juan Capistrano (City) received no comments concerning the proposed project's potential impacts to air quality during the scoping period for this Draft Environmental Impact Report (EIR). In addition, no comments pertaining to air quality were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** to this Draft EIR.

4.2.2 Existing Environmental Setting

The City is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAQMD. Background information about air pollutants and health effects, climate, meteorological conditions, and regional air quality conditions in the Basin and local air quality conditions in the vicinity of the City are provided below.

4.2.2.1 Air Pollutants and Health Effects

Both State and federal governments have established human health-based ambient air quality standards (California Ambient Air Quality Standards [CAAQS] and National Ambient Air Quality Standards [NAAQS], respectively) for six criteria air pollutants:[1] carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and particulate matter 2.5 micrometers in diameter and less ($PM_{2.5}$) and particulate matter 10 micrometers in diameter and less (PM_{10}). In addition, the State has set standards for sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects.

When the United States Environmental Protection Agency (U.S. EPA) establishes or revises NAAQS for criteria pollutants, states must evaluate their air basins for attainment of the revised/new standards. The California Air Resources Board (CARB) designates areas that meet the NAAQS or CAAQS as being in "attainment" of the standards. Areas that exceed the NAAQS or CAAQS are designated as being in "nonattainment" of the standards. States with nonattainment areas must develop State Implementation Plans (SIPs) documenting how attainment of the standards will be accomplished. Emission thresholds established by an air district are used to manage total regional

[1] Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no known direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_X) and volatile organic compounds (VOCs).

Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous outdoor work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

4.2.2.2 Criteria Pollutants

As identified above, State and federal AAQS have been established for the following criteria pollutants: CO, O_3, NO_2, SO_2, Pb, $PM_{2.5}$, and PM_{10}. These pollutants are regulated due to their potential to cause adverse effects on public health and the environment. In addition, key pollutant constituents—such as VOCs, which contribute to ozone formation—are also evaluated in air quality analyses. The characteristics, primary sources, and health effects of these criteria pollutants and related constituents are described below.

Ozone (O_3). Rather than being directly emitted, ozone (smog) is formed by photochemical reactions between NO_x and VOCs. Ozone is a pungent, colorless gas. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children. Ozone levels peak during the summer and early fall months.

Particulate Matter ($PM_{2.5}$ and PM_{10}). Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are 10 micrometers or less in diameter, or PM_{10}. Fine, suspended particulate matter with an aerodynamic diameter of 2.5 micrometers or less, or $PM_{2.5}$, is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as byproducts of fuel combustion; through abrasion, such as tire or brake lining wear; or through fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens

and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

Carbon Monoxide (CO). CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Nitrogen Dioxide (NO_2). NO_2 is a reddish-brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, NO_2 also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide (SO_2). SO_2 is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the region. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Lead (Pb). Leaded gasoline (phased out in the United States beginning in 1973), paint (on older houses and cars), smelters (metal refineries), and the manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has multiple adverse neurotoxic health effects, and children are at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. In California, ambient lead concentrations are only monitored on an as-warranted, site-specific basis. On October 15, 2008, the U.S. EPA strengthened the national ambient air quality standard for lead by lowering it from 1.5 to 0.15 micrograms per cubic meter ($\mu g/m^3$). The U.S. EPA revised the monitoring requirements for lead in December 2010. These requirements focus on airports and large urban areas, resulting in an increase in 76 monitors nationally.

Volatile Organic Compounds (VOCs). VOCs (also known as reactive organic gases [ROGs] and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants, however, because VOCs accumulate in the atmosphere more quickly during the winter, when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.

Toxic Air Contaminants (TACs). In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the U.S. EPA and California Air Resources Board (CARB). Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

TACs do not have AAQS, but are regulated by U.S. EPA, CARB, and SCAQMD. In 1998, the CARB identified particulate matter from diesel-fueled engines as a TAC. The CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.[2] High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high-volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Unlike TACs emitted from industrial and other stationary sources noted above, most diesel particulate matter is emitted from mobile sources—primarily "off-road" sources such as construction and mining equipment, agricultural equipment, and truck-mounted refrigeration units, as well as "on-road" sources such as trucks and buses traveling on freeways and local roadways.

Although not specifically monitored, recent studies indicate that exposure to diesel particulate matter may contribute significantly to a cancer risk (a risk of approximately 500 to 700 in 1,000,000) that is greater than all other measured TACs combined.[3] The technology for reducing diesel particulate matter emissions from heavy-duty trucks is well established, and both State and federal agencies are moving aggressively to regulate engines and emission control systems to reduce and remediate diesel emissions. The CARB anticipates that by 2020, average statewide diesel particulate matter concentrations will decrease by 85 percent from levels in 2000 with full implementation of the CARB's Diesel Risk Reduction Plan,[4] meaning that the statewide health risk from diesel particulate matter is expected to decrease from 540 cancer cases in 1,000,000 to 21.5 cancer cases in 1,000,000.

Table 4.2.A: Sources and Health Effects of Air Pollutants summarizes the sources and health effects of air pollutants discussed in this section.

4.2.2.3 National and State Ambient Air Quality Standards

As discussed in Section 4.2.2.1, Air Pollutants and Health Effects, both the U.S. EPA and the State have established health-based ambient air quality standards for criteria pollutants (CO, O_3, NO_2, SO_2, Pb, $PM_{2.5}$, and PM_{10}). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These ambient air quality standards set levels of contaminants that avoid specific adverse health effects associated with each pollutant.

2 California Air Resources Board (CARB). 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

3 California Air Resources Board (CARB). 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

4 Ibid.

Table 4.2.A: Sources and Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	● Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust ● Natural events, such as decomposition of organic matter	● Reduced tolerance for exercise ● Impairment of mental function ● Impairment of fetal development ● Death at high levels of exposure ● Aggravation of some heart diseases (angina)
Nitrogen Dioxide (NO_2)	● Motor vehicle exhaust ● High temperature stationary combustion ● Atmospheric reactions	● Aggravation of respiratory illness ● Reduced visibility ● Reduced plant growth ● Formation of acid rain
Ozone (O_3)	● Atmospheric reaction of organic gases with nitrogen oxides in sunlight	● Aggravation of respiratory and cardiovascular diseases ● Irritation of eyes ● Impairment of cardiopulmonary function ● Plant leaf injury
Lead (Pb)	● Contaminated soil	● Impairment of blood functions and nerve construction ● Behavioral and hearing problems in children
Suspended Particulate Matter ($PM_{2.5}$ and PM_{10})	● Stationary combustion of solid fuels ● Construction activities ● Industrial processes ● Atmospheric chemical reactions	● Reduced lung function ● Aggravation of the effects of gaseous pollutants ● Aggravation of respiratory and cardiorespiratory diseases ● Increased cough and chest discomfort ● Soiling ● Reduced visibility
Sulfur Dioxide (SO_2)	● Combustion of sulfur-containing fossil fuels ● Smelting of sulfur-bearing metal ores Industrial processes	● Aggravation of respiratory diseases (asthma, emphysema) ● Reduced lung function ● Irritation of eyes ● Reduced visibility ● Plant injury ● Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board (2015).

Federal standards include both primary and secondary standards. Primary standards establish limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings.[5] State and federal standards for the criteria air pollutants are listed in **Table 4.2.B: Federal and State Ambient Air Quality Standards**.

[5] United States Environmental Protection Agency (USEPA). 2017. Criteria Air Pollutants. October. Website: www.epa.gov/criteria-air-pollutants (accessed February 2026).

Table 4.2.B: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]		Federal Standards[b]		
		Concentration[c]	Method[d]	Primary[c,e]	Secondary[c,f]	Method[g]
Ozone (O_3)[h]	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[i]	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter ($PM_{2.5}$)[i]	24-Hour	-		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	9.0 µg/m^3	15.0 µg/m3	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	–	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO_2)[j]	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemi-luminescence	53 ppb (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemi-luminescence
	1-Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	-	
Lead (Pb)[l,m]	30-Day Average	1.5 µg/m^3	Atomic Absorption	–	–	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[l]	Same as Primary Standard	
	Rolling 3-Month Average[i]	–		0.15 µg/m^3		
Sulfur Dioxide (SO_2)[k]	24-Hour	0.04 ppm (105 µg/m3)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3-Hour	–		–	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		75 ppb (196 µg/m^3)[k]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[k]	–	
Visibility-Reducing Particles[l]	8-Hour	See footnote n	Beta Attenuation and Transmittance through Filter Tape.	No Federal Standards		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[j]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: California Air Resources Board (2024) (Website: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf).

Table notes are provided on the following page.

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

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

[c] 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.

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

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

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

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

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

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. In February 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12 µg/m^3 to 9.0 µg/m^3; the secondary annual standard remained at 15 µg/m^3. The existing national 24- hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] 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.

[k] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[l] The CARB 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.

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

[n] In 1989, the CARB 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.

°C = degrees Celsius
µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
mg/m^3 = milligrams per cubic meter
ppb = parts per billion
ppm = parts per million
USEPA = United States Environmental Protection Agency

4.2.2.4 Existing Climate and Air Quality

The following provides a discussion of the climate, regional, and local air quality in San Juan Capistrano.

Climate and Meteorology. Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions from the second-largest urban area in the United States gives the Basin some of the worst air pollution in the nation.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60 degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. Based on data provided by the Western Regional Climate Center, there are no climatological stations located in San Juan Capistrano. Other nearby stations are located in Laguna Beach, Newport Beach, Tustin, and Santa Ana. Based on the nearby stations, the climatological station closest to the site is the Laguna Beach Station.[6] The monthly average maximum temperature recorded at this station ranged from 65.1°F in January to 78.1°F in August, with an annual average maximum of 71.2°F. The monthly average minimum temperature recorded at this station ranged from 43.0°F in January to 59.6°F in August, with an annual average minimum of 51.0°F. These levels are representative of the project site.

The majority of annual rainfall in the Basin occurs between November and March. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. Average monthly rainfall at the Laguna Beach Station varies from 0.03 inch in July to 2.77 inches in February, with an annual total of 12.52 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-afternoon to late afternoon on hot summer days when the air appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the vicinity of the project site blow predominantly from the south-southwest, with relatively low velocities. Wind speeds in the vicinity of the project site average about five miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north or northeasterly winds, known as Santa Ana winds, occur

[6] Western Regional Climate Center. n.d. Recent Climate in the West. Website: http://www.wrcc.dri.edu, (accessed February 2026).

during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and NO_X because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog. Smog is a general term for naturally occurring fog that has become mixed with smoke or pollution. In this context it is better described as a form of air pollution produced by the photochemical reaction of sunlight with pollutants that have been released into the atmosphere, especially by automotive emissions.

Attainment Status. As discussed in Section 4.2.2.1, Air Pollutants and Health Effects, the CARB is required to designate areas of the State as being in attainment, nonattainment, or unclassified for all State standards. An *attainment* designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A *nonattainment* designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An *unclassified* designation signifies that data do not support either an attainment or nonattainment status. The California Clean Air Act (CCAA) divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for O_3, CO, and NO_2 as either does not meet the primary standards, cannot be classified, or better than national standards. For SO_2, areas are designated as does not meet the primary standards, does not meet the secondary standards, cannot be classified, or better than national standards. In February 2024, the USEPA issued a final revised standard for $PM_{2.5}$ to lower the primary standard from 12 µg/m^3 to 9 µg/m^3.

Table 4.2.C: Attainment Status of Criteria Pollutants in the South Coast Air Basin provides a summary of the attainment status for the Basin with respect to NAAQS and CAAQS.

Table 4.2.C: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	Extreme Nonattainment
O_3 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	N/A	Attainment/Unclassified
Lead	Attainment	Attainment[1]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: SCAQMD (2018).
[1] Except in Los Angeles County.
CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide

Air Quality Monitoring Results. Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The SCAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring stations closest to the project site are located at 26081 Via Pera in Mission Viejo and 1630 West Pampas Lane in Anaheim.

Pollutant monitoring results for years 2022 to 2024 at the Mission Viejo and Anaheim ambient air quality monitoring stations, shown in **Table 4.2.D: Ambient Air Quality at the Nearby Monitoring Stations**, indicate that air quality in the area has generally been good. As indicated in the monitoring results, the federal PM_{10} standard had no exceedances in the three-year period. The State PM_{10} standard had only one exceedance, in 2023. The $PM_{2.5}$ federal standard had no exceedances in 2022, one in 2023, and five in 2024. The 1-hour ozone State standard was exceeded one time in 2022, and three times in 2024. The 8-hour ozone State standard was exceeded six times in 2022, two times in 2023, and 3 times in 2024. The 8-hour ozone federal standard was exceeded five times in 2022, two times in 2023, and three times in 2024. In addition, the CO and NO_2 standards were not exceeded in this area during the three-year period. SO_2 is not monitored at either of the closest air quality monitoring stations to the project site.

Table 4.2.D: Ambient Air Quality at the Nearby Monitoring Stations

Pollutant	Standard	2022	2023	2024
Carbon Monoxide (CO)[1]				
Maximum 1-hour concentration (ppm)		2.5	2.5	2.8
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		1.4	1.6	2.4
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O_3)[1]				
Maximum 1-hour concentration (ppm)		0.110	0.089	0.104
Number of days exceeded:	State: > 0.09 ppm	1	0	3
Maximum 8-hour concentration (ppm)		0.089	0.077	0.079
Number of days exceeded:	State: > 0.07 ppm	6	2	3
	Federal: > 0.07 ppm	5	2	3
Coarse Particulates (PM_{10})[1]				
Maximum 24-hour concentration (µg/m^3)		30.4	99.4	42.7
Number of days exceeded:	State: > 50 µg/m^3	0	1	0
	Federal: > 150 µg/m^3	0	0	0
Annual arithmetic average concentration (µg/m^3)		12.7	23	ND
Exceeded for the year:	State: > 20 µg/m^3	No	Yes	ND
	Federal: > 50 µg/m^3	No	No	ND
Fine Particulates ($PM_{2.5}$)[1]				
Maximum 24-hour concentration (µg/m^3)		22.6	50.7	49.7
Number of days exceeded:	Federal: > 35 µg/m^3	0	1	5
Annual arithmetic average concentration (µg/m^3)		ND	9.1	10.5
Exceeded for the year:	State: > 12 µg/m^3	ND	No	No
	Federal: > 15 µg/m^3	ND	No	No
Nitrogen Dioxide (NO_2)[2]				
Maximum 1-hour concentration (ppm)		0.053	0.050	0.053
Number of days exceeded:	State: > 0.250 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.011	0.010	0.010
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)				
Maximum 1-hour concentration (ppm)		ND	ND	ND
Number of days exceeded:	State: > 0.25 ppm	ND	ND	ND
Maximum 24-hour concentration (ppm)		ND	ND	ND
Number of days exceeded:	State: > 0.04 ppm	ND	ND	ND
	Federal: > 0.14 ppm	ND	ND	ND
Annual arithmetic average concentration (ppm)		ND	ND	ND
Exceeded for the year:	Federal: > 0.030 ppm	ND	ND	ND

Sources: CARB (2024) and USEPA (2024).

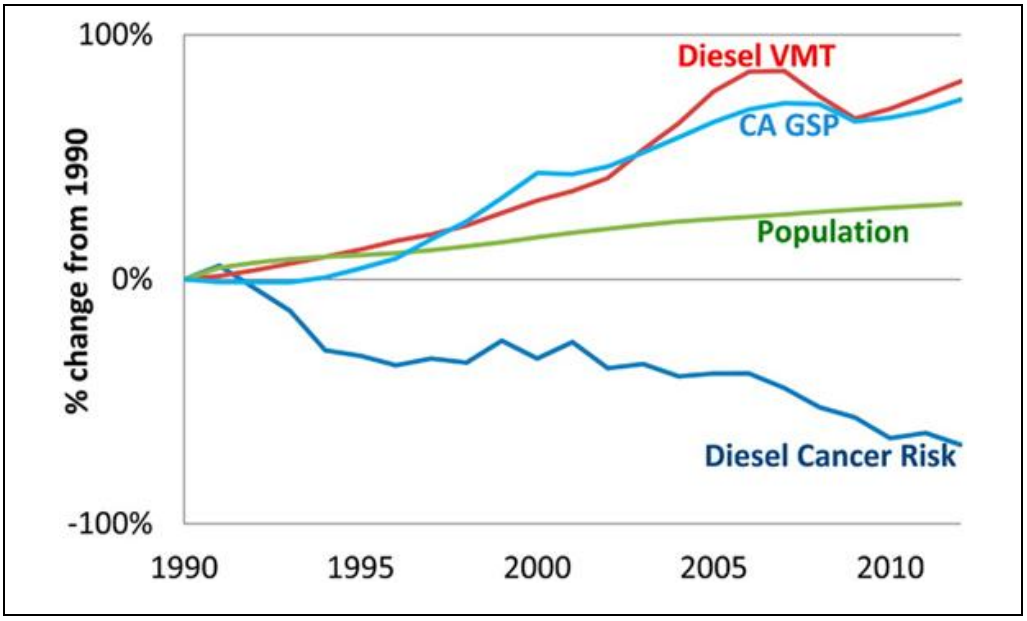
[1] Data from 2022 was taken from the Mission Viejo Monitoring Station and data from 2023-2024 was taken from the Anaheim Monitoring Station.

[2] Data was taken from the Anaheim Monitoring Station.

µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
ND = No data. There were insufficient (or no) data to determine the value.
ppm = parts per million
USEPA = United States Environmental Protection Agency

Toxic Air Contaminant Trends. In 1984, the CARB adopted regulations to reduce TAC emissions from mobile and stationary sources, as well as consumer products. A CARB study showed that ambient concentrations and emissions of the seven TACs responsible for the most cancer risk from airborne exposure declined by 76 percent between 1990 and 2012.[7] Concentrations of diesel particulate matter, a key TAC, declined by 68 percent between 1990 and 2012, despite a 31 percent increase in State population and an 81 percent increase in diesel vehicle miles traveled (VMT), as shown on **Figure 4.2-1**: **California Population, Gross State Product (GSP), Diesel Cancer Risk, and Diesel Vehicle Miles Traveled (VMT) Regulatory Contex**t, below. The study also found that the significant reductions in cancer risk to California residents from the implementation of air toxics controls are likely to continue.

Figure 4.2-1: California Population, Gross State Product (GSP), Diesel Cancer Risk, and Diesel Vehicle Miles Traveled (VMT) Regulatory Context



Source: Ambient and Emission Trends of Toxic Air Contaminants in California (Propper, Ralph, et al. 2015).

The USEPA and the CARB regulate direct emissions from motor vehicles. The SCAQMD is the regional agency primarily responsible for regulating air pollution emissions from stationary sources (e.g., factories) and indirect sources (e.g., traffic associated with new development), as well as monitoring ambient pollutant concentrations.

[7] Propper, Ralph, Patrick Wong, Son Bui, Jeff Austin, William Vance, Álvaro Alvarado, Bart Croes, and Dongmin Luo. 2015. Ambient and Emission Trends of Toxic Air Contaminants in California. *American Chemical Society: Environmental Science & Technology*. Website: pubs.acs.org/doi/full/10.1021/acs.est.5b02766 (accessed February 2026).

4.2.3 Regulatory Setting

The following describes the federal, State, and local regulations and policies related to air quality that are relevant to the proposed project.

4.2.3.1 Federal Policies and Regulations

Federal Clean Air Act. The 1970 Federal Clean Air Act (CAA) authorized the U.S. EPA to establish national health-based air quality standards and also set deadlines for their attainment (NAAQS). The Federal Clean Air Act Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required of areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop SIPs to demonstrate how they will achieve the NAAQS by specified dates.

4.2.3.2 State Policies and Regulations

California Clean Air Act. Assembly Bill (AB) 2595, the California Clean Air Act (CCAA), was signed into law in 1988 and requires all areas of the State to achieve and maintain the CAAQS. The CCAA mandates achievement of the maximum degree of emission reductions possible from vehicular and other mobile sources to attain the CAAQS by the earliest practical date. The CARB, which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for ensuring implementation of the CCAA and federal CAA and for regulating emissions from consumer products and motor vehicles within California. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the Basin because they are not considered a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS. All air basins have been formally designated as attainment or non-attainment for each CAAQS.

Non-attainment areas are required to prepare AQMPs that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Development of control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);
- An SCAQMD permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementation of reasonably available transportation control measures and assurance of a substantial reduction in growth rate of vehicle trips and miles traveled.
- Significant use of low-emission vehicles by fleet operators; and
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for VOCs, NO_X, CO, and PM_{10}. However, air basins

may use an alternative emission reduction strategy that achieves a reduction of less than five percent per year under certain circumstances.

California Air Resources Board. The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act. Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances that their facilities routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

The California Air Resources Board Handbook. CARB has developed an Air Quality and Land Use Handbook[8] (CARB Handbook) (2005), which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. According to the CARB Handbook, air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that county and city planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools, and playgrounds.

Land use designations with air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the CARB Handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

[8] California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook). April.

The CARB Handbook specifically states that its recommendations are advisory and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The recommendations are generalized and do not consider site-specific meteorology, freeway truck percentages, or other factors that influence risk for a particular project site. The purpose of this guidance is to further examine project sites for actual health risk associated with the location of new sensitive land uses.

California State Implementation Plan. The CAA mandates that each state submit and implement SIPs. States containing areas violating the NAAQS are required to revise their SIPs to include additional control measures aimed at reducing air pollution. The SIP is required to include strategies and control measures to attain the NAAQS by deadlines established by the CAA. The EPA reviews all SIPs to determine conformance with the CAA.

State law mandates the CARB to serve as the lead agency for all purposes related to SIPs, which are prepared by local air quality districts and other agencies and submitted to the CARB for review and approval. Subsequently, the CARB forwards SIP revisions to the EPA for approval and publication in the Federal Register. The 2016 AQMP is the SIP for the Basin and is a regional blueprint for implementing air quality standards within areas under SCAQMD jurisdiction, which is discussed further below.

In addition to the CCAA, the CARB:

- Establishes and enforces emissions standards for motor vehicles, fuels, and consumer products;
- Establishes health-based air quality standards;
- Conducts research;
- Monitors air quality;
- Identifies and promulgates control measures for TACs;
- Provides compliance assistance for businesses;
- Produces education and outreach programs and materials; and
- Oversees and assists local air quality districts that regulate most non-vehicular sources of air pollution.

Toxic Air Contaminants Regulations. The State Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) hazardous air pollutants. In 1987, the Legislature enacted the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 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 hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years. TAC emissions from individual facilities are quantified and

prioritized. "High-priority" facilities are required to perform an HRA, and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

The CARB reviews scientific research on exposure and health effects to identify the toxic air pollutants that pose the greatest threat to public health. One of the primary health risks of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is of particular public health concern because it is currently believed by many scientists that there is no "safe" level of exposure to carcinogens (i.e., any exposure to a carcinogen poses some risk of causing cancer). Health statistics show that 1 in 4 people (or 250,000 in 1 million) will contract cancer over their lifetime from all causes, including diet, genetic factors, and lifestyle choices (SCAQMD 2009).

Unlike carcinogens, most non-carcinogens have a threshold level of exposure below which the compound will not pose a health risk. CalEPA and the Office of Environmental Health Hazard Assessment (OEHHA) have developed reference exposure levels (RELs) for non-carcinogenic TACs that are health-conservative estimates of the levels of exposure at or below which health effects are not expected. The non-cancer health risk due to exposure to a TAC is assessed by comparing the estimated level of exposure to the REL. The comparison is expressed as the ratio of the estimated exposure level to the REL, called the Hazard Index.

Diesel Regulations. As part of California's Diesel Risk Reduction Plan, the CARB has passed numerous regulations to reduce diesel emissions from vehicles and equipment that are already in use. Combining these retrofit regulations with new engine standards for diesel-fueled vehicles and equipment, the CARB intends to reduce diesel particulate matter (DPM) emissions by 85 percent due to the installation of diesel particulate filters. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several airborne toxic control measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 California Code of Regulations [CCR] 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Diesel Fuels. California Diesel Fuel Regulations (13 CCR §§2281-2285; 17 CCR §93114) provide standards for motor vehicle fuels and diesel fuel.

In-Use Off-Road Diesel Vehicle Regulation. The CARB In-Use Off-Road Diesel Vehicle Regulation establishes various requirements for owners of off-road diesel vehicles, with engine ratings of 25 horsepower (hp) and greater, to reduce emissions of NO_X and DPM generated during combustion. Requirements to date have included reporting fleet vehicles to the CARB, obtaining a CARB-issued equipment identification number for all diesel-fleet vehicles, and developing and implementing a written idling policy restricting non-essential idling to less than 5 minutes. Emission performance requirements became effective January 2014, and established fleet average targets for NO_X emission reductions. Emission performance can be achieved through fleet turnover and use of newer model year equipment, as well as installation of certified retrofit equipment such as a particulate filter.

On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation. The CARB On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation applies to diesel-fueled trucks and buses with a gross vehicle weight greater than 14,000 pounds. The regulation establishes a phase-in schedule for fleet owners and operators to reduce emissions of particulate matter through fleet turnover and/or installation of retrofit equipment such as exhaust filters. The phase-in schedule began January 1, 2012, and applies to fleets based on model year.

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

4.2.3.3 Regional Policies and Regulations

South Coast Air Quality Management District. The SCAQMD has jurisdiction over most air quality matters in the South Coast Air Basin (Basin). This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin and is tasked with implementing certain programs and regulations required by the CAA and the CCAA. The SCAQMD prepares plans to attain CAAQS and NAAQS. The SCAQMD is directly responsible for reducing emissions from stationary (area and point) sources. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

SCAQMD Rules and Regulations. The proposed project would be subject to the following SCAQMD rules and regulations:

- **Regulation IV – Prohibitions:** This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air pollutant emissions, fuel contaminants, start-up/shutdown exemptions, and breakdown events.
    - **Rule 402 – Nuisance:** This rule restricts the discharge of any contaminant in quantities that cause or have a natural ability to cause injury, damage, nuisance, or annoyance to businesses, property, or the public.
    - **Rule 403 – Fugitive Dust:** This rule requires the prevention, reduction, or mitigation of fugitive dust emissions from a project site. Rule 403 restricts visible fugitive dust to a project property line, restricts the net PM_{10} emissions to less than 50 micrograms per cubic meter ($\mu g/m^3$) and restricts the tracking out of bulk materials onto public roads. Additionally, Rule 403 requires an Applicant to utilize one or more of the best available control measures (identified in the tables within the rule). Control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, Rule 403 requires that a

contingency plan be prepared if so determined by the U.S. EPA. In addition, SCAQMD Rule 403(e), Additional Requirements for Large Operations, includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control training class in the South Coast Air Basin.

- **Regulation XI – Source Specific Standards:** Regulation XI sets emissions standards for different sources.
    - **Rule 1113 – Architectural Coatings:** This rule limits the amount of VOCs from architectural coatings and solvents, which lowers the emissions of odorous compounds.

Air Quality Management Plan. The SCAQMD is responsible for demonstrating regional compliance with ambient air quality standards but has limited indirect involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD works cooperatively with the CARB, the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and other federal and State government agencies. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs) to meet CAAQS and NAAQS. SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. Every 3 years, SCAQMD prepares a new AQMP, updating the previous plan and 20-year horizon.[9]

The Final 2022 AQMP is the currently adopted AQMP. Key elements of the Final 2022 AQMP include the following:

- Calculating and taking credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation);
- A strategy with fair-share emission reductions at the federal, State, and local levels;
- Investment in strategies and technologies meeting multiple air quality objectives;
- Seeking new partnerships and significant funding for incentives to accelerate deployment of zero-emission and near-zero emission technologies;
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis;
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures;
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the O_3 strategy; and

[9] South Coast Air Quality Management District (SCAQMD). 2022. *Final 2022 Air Quality Management Plan*. December 2.

- Attainment of the 1-hour O_3 standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures).

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard, which is the most current ozone standard.

Southern California Association of Governments. SCAG is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the Southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

SCAG adopted the 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) on April 4, 2024. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

4.2.3.4 Local Policies and Regulations

City of San Juan Capistrano General Plan. The Environmental Justice and Conservation and Open Space Elements of the City's General Plan contain the following goals and implementing policies related to air quality that would be applicable to the proposed project:

- **Environmental Justice Goal 1:** Promote land use and development patterns that reduce air pollution exposure and improve respiratory health for residents of the Community of Focus.
    - **Policy 1.1:** Partner with the South Coast Air Quality Management District to monitor local air quality and identify main pollution sources.
    - **Policy 1.4:** Encourage project proponents to prepare health risk assessments in accordance with California Air Resources Board and South Coast Air Quality Management District recommended procedures if new construction is proposed within 500 feet of the freeway.
    - **Policy 1.6:** Work with equestrian facilities in the Community of Focus to ensure best practices and measures are being implemented to address dust.
- **Conservation and Open Space Goal 6:** Improve air quality.
    - **Policy 6.1:** Cooperate with the South Coast Air Quality Management District and Southern California Association of Governments in their efforts to implement the regional Air Quality Management Plan.
    - **Policy 6.2:** Cooperate and participate in regional air quality management planning, programs, and enforcement measures.
    - **Policy 6.5:** Integrate air quality planning with land use and transportation planning.

City of San Juan Capistrano Municipal Code. Building and construction in the city are subject to the regulations of the City's Municipal Code. The following provisions of the City's Municipal Code are related to air quality:

- **Article 3, Mobile Source Emissions Reduction:** The purpose of Article 3 of the City's Municipal Code is to support the SCAQMD in their efforts to comply with California Clean Air Act and the Federal Clean Air Act as amended and improve regional and local air quality through mobile source air pollution reduction programs.
- **Article 4, Nuisances, Section 9-2.401(6):** Section 9-2.401(6) of the City's Municipal Code states that no operation or activity shall cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution which can cause damage to health, animals, vegetation, or other forms of property, or which can cause excessive soiling on any other lot, and that no emission shall be permitted which exceeds the requirements of the SCAQMD.

4.2.4 Methodology

4.2.4.1 Criteria Pollutants

Air pollutant emissions associated with the proposed project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed project.

The California Emissions Estimator Model (CalEEMod) Version 2022.1 provides a platform to calculate both construction emissions and operational emissions from a project. It calculates both the daily maximum and annual average for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions. The model also provides default values for water and energy use. Specifically, the model performs the following calculations.

- Short-term construction emissions associated with demolition, site preparation, grading, building, architectural coating (painting), and paving from off-road construction equipment; on-road mobile equipment associated with workers, vendors, delivery, and hauling; fugitive dust associated with grading, demolition, truck loading, and roads; and volatile emissions of volatile organic compounds (VOCs) from architectural coating and paving.

- Operational emissions, such as on-road mobile vehicle traffic generated by the land uses, fugitive dust associated with roads, volatile emissions of reactive organic gases (ROGs) from architectural coatings, off-road emissions from landscaping equipment, volatile emissions of ROGs from consumer products and cleaning supplies, natural gas usage in the buildings, electricity usage in the buildings, water usage by the land uses, and solid waste disposal by the land uses.

In addition, CalEEMod contains default values and existing regulation methodologies to use in each specific local air quality district region. Appropriate statewide default values can be utilized if regional default values are not defined. As described in the following sections, this analysis utilized project-specific inputs and relevant model default factors for the Orange County area, which is within the SCAQMD jurisdiction for the emissions inventory, consistent with SCAQMD requirements.

Construction Emissions. Construction emissions were estimated for the project using CalEEMod. As discussed in Chapter 3.0, Project Description, construction of all proposed project phases is anticipated to be completed over approximately three years, beginning within three years of the certification of the EIR (i.e. 2029). Therefore, to provide a conservative estimate of the emissions that could occur due to construction activities, this analysis assumes that project construction will begin in mid-2029 and be operational in 2032. This represents a conservative analysis because if the proposed construction activities should occur at a later timeframe, estimated emissions would be expected to decrease into the future due to technological advances and the implementation of forthcoming regulatory requirements. Furthermore, this analysis assumes the project would be constructed in a single phase, resulting in a more compressed construction timeframe. This approach is conservative because it concentrates construction activities, increasing the potential for higher peak daily emissions compared to a more phased or extended construction schedule. The proposed project would include the demolition of the existing 1,600 square-foot barn in the Community Building Core, which was included in CalEEMod. In addition, the proposed project would be balanced on-site, and no import or export of soil is anticipated. During construction, the proposed project would disturb approximately 25 acres, which was included in CalEEMod. This analysis assumes the use of Tier 3 equipment and that the proposed project would comply with SCAQMD Rule 403 measures. All other construction details are not yet known; therefore, default assumptions (e.g., construction equipment, worker and truck trips and fleet activities) from CalEEMod were used. The default assumptions applied in CalEEMod are derived from representative, industry-standard construction practices and are generally considered conservative because they are intended to be

broadly applicable across a range of project types and conditions. In particular, default equipment inventories and usage factors tend to reflect typical or upper-bound activity levels, and default worker and vendor trip assumptions may overestimate actual trip generation where project-specific efficiencies (e.g., ride-sharing, local labor pools, or optimized delivery schedules) could occur. As a result, the use of CalEEMod default values reasonably approximate construction-related emissions in the absence of detailed data.

Operational Emissions. Consistent with the SCAQMD guidance for estimating emissions associated with land use development projects, CalEEMod was used to calculate the long-term operational emissions associated with the project. The proposed project would develop the Legacy Ranch within the Northwest Open Space (NWOS) Specific Plan Area. The Legacy Ranch would consist of several different land uses arranged in seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, while preserving the existing uses on site including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village. Each core is described in more detail in Chapter 3.0, Project Description.

The proposed project analysis was conducted using land use:[10] *Place of Worship, Single Family Housing, High Turnover (Sit Down Restaurant), Medical Office Building, Arena, General Office Building, Parking Lot, Other Non-Asphalt Surfaces,* and *City Park*. Because CalEEMod does not include land use types specific to horse barns, veterinary barns, amenities buildings, or agricultural and event barns, alternative land use types were selected to ensure conservative emissions estimates. The proposed food service area and catering building were modeled using the *High Turnover (Sit-Down Restaurant)* category, which represents higher-intensity energy and equipment use relative to the proposed use. Similarly, *Medical Office Building* and *General Office Building* land use types were applied to represent the horse barn, veterinary barn, and agricultural event barn. These land use types are more intensive in terms of internal building energy use, conditioned space, lighting, ventilation, and plug loads than the agricultural and livestock-related structures included in the project, which would have substantially lower energy demands and more limited occupancy. Lastly, the roping and warm up arenas were modeled using the Arena land use category. Use of these higher-intensity land use types therefore provides a conservative basis for estimating operational emissions and ensures that project-related air quality impacts are not underestimated. Additionally, the proposed equestrian facility would be sized to host a variety of equestrian events and would have the capacity to stable up to 149 horses. Up to 29 roping cattle could be accomdated in place of 29 horses. While cattle are a known source of methane, a greenhouse gas, other criteria pollutant emissions from both cattle and horses are relatively low and would not substantially contribute to overall pollutant levels. Therefore, these emissions were not included in the analysis.

Furthermore, CalEEMod assumes natural gas usage by default. However, natural gas consumption for the proposed project would be limited to the commercial kitchen. Therefore, consistent with the project design plans, this analysis adjusts the model inputs so that natural gas usage is only

[10] For purposes of analyzing criteria air pollution emissions, CalEEMod (Version 2022.1) incorporates 79 land uses from the Institute of Traffic Engineers (ITE) *Trip Generation Manual,* (10th Edition, 2017). These land uses are similar to but vary from the land uses employed for purposes of evaluating transportation impacts, which utilizes the most recent version of the ITE *Trip Generation Manual* (12th Edition, 2025) and allows for a wider number of land uses for consideration in the analysis.

attributed to the commercial kitchen use associated with the Ranch House and agricultural catering building. In addition, the CalEEMod analysis assumes that the proposed project would be operational in 2032. Trip generation rates used in CalEEMod for the project were based on the project's trip generation described in Section 4.11, Transportation, which identifies that the proposed project would generate approximately 1,149 average daily trips[11]. To maintain internal consistency, the modeled trip rates in CalEEMod were scaled to match the project-specific trip generation identified in Section 4.11, Transportation.

4.2.4.2 Construction Health Risk Assessment.

For the purposes of a construction Health Risk Assessment (HRA), short-term emissions are of concern for analyzing acute health impacts, and long-term emissions are of concern for analyzing chronic and carcinogenic health impacts. A screening-level multi-pathway assessment has been conducted. This technique was chosen as recommended in the OEHHA *Air Toxic Hot Spots Program Risk Assessment Guidelines*[12] and guidance from the SCAQMD.

This HRA has been conducted using three models: (1) CARB's California Emissions Factor Model, Version 2021 (EMFAC2021) for on-road vehicle emissions factors and percentages of fuel type within the overall vehicle fleet; (2) the USEPA's AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways; and (3) CARB's HARP2 model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, DPM made people with allergies more susceptible to the materials to which they were allergic, such as dust and pollen. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. The HRA analysis used PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance.

The conservative nature of this analysis is due primarily to the following three factors:

- The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in 1 million per $\mu g/m^3$ is based on the upper 95th percentile of estimated risk for each of the epidemiological studies used to

[11] This analysis evaluated project emissions based on a trip generation rate of 1,149 average daily trips (ADT). The project's trip generation has since been refined to 1,104 ADT. This revised trip generation was reviewed by LSA and determined to result in lower overall emissions and, therefore, would not generate more severe air quality impacts than those described in this analysis. Therefore, the use of the higher trip generation in this analysis represents a conservative assumption.

[12] California Environmental Protection Agency Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed February 2026).

develop the URF. Therefore, the risk factor is already representative of the conservative risk posed by DPM.

- The risk estimates assume sensitive receptors would be subject to DPM 24 hours per day, 350 days per year. As a conservative measure, SCAQMD does not recognize indoor adjustments for residents. However, typical people spend the majority of their time indoors versus remaining outdoors 24 hours per day, 350 days per year.

- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 70 years). However, emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancement to reduce DPM.

To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). The HRA analysis used PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance.[13] Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data. Details of these inputs are included in **Appendix D.**

CARB's HARP2 model is a tool that assists with the programmatic requirements of the Air Toxics "Hot Spots" Program (Assembly Bill 2588). HARP2 was used to translate the TAC concentrations from AERMOD into long-term carcinogenic and chronic, and short-term acute health risk levels following the guidance in the SCAQMD and OEHHA risk assessment guidelines. These guidelines specify a minimum set of TAC pathways and HARP2 modeling options for the carcinogenic assessment. To estimate chronic noncancer risks at residential receptors, the "RMP-Derived Method" risk-calculation option was used. Following the OEHHA guidance, an 8-hour chronic noncancer risk was calculated for residential receptors because the project would operate more than eight hours per day and five days per week.

The dose-response relationship for a specific pollutant describes the association between exposure and the observed response (health effect). In other words, the relationship estimates how different levels of exposure to a pollutant change the likelihood and severity of health effects. The dose-response relationship (the response occurring with increasing doses) varies with each pollutant, individual sensitivity, and type of health effect. Combining the results of the emission characterization and dispersion modeling described above with the dose-response assessment gives

[13] California Environmental Protection Agency Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed February 2026).

an estimate of the increased health risk for an individual exposed to the maximum predicted long-term concentrations of TACs.

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were default rates as presented in the OEHHA guidance document entitled *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*[14] and guidance from the SCAQMD.

4.2.5 Thresholds of Significance

The thresholds of significance for air quality impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines*. Consistent with Appendix G, implementation of the proposed project would have a significant adverse impact with respect to air quality if it would:

Threshold 4.2.1: Conflict with or obstruct implementation of the applicable air quality plan;

Threshold 4.2.2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;

Threshold 4.2.3: Expose sensitive receptors to substantial pollutant concentrations; or

Threshold 4.2.4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As stated in Appendix G of the *State CEQA Guidelines*, where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations about a project's impacts. This analysis uses the adopted thresholds of the SCAQMD, the local air quality management district, as further discussed below.

4.2.5.1 Regional Emissions Thresholds

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the South Coast Air Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

[14] California Environmental Protection Agency Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed February 2026).

Table 4.2.E: Regional Thresholds for Construction and Operational Emissions lists the CEQA significance thresholds for construction and operational emissions established for the Basin. Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Table 4.2.E: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_x	CO	PM_{10}	$PM_{2.5}$	SO_x
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: SCAQMD. Air Quality Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed February 2026).

CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

4.2.5.2 Localized Impacts

The SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[15] This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the source receptor area, and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the Capistrano Valley (SRA 21). SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances for projects that are five acres in size or less. If the project exceeds the five-acre LST threshold, then additional dispersion modeling analysis would be required. The closest sensitive receptors to the project site are residential uses including single-family homes, which are located adjacent to the northern property line at approximately 45 feet from the project site's northern boundary. Based on the anticipated construction equipment and based on the grading and ground-disturbing activities assumed in CalEEMod, it is assumed that the maximum daily disturbed acreage during construction of the

[15] South Coast Air Quality Management District (SCAQMD). 2008. *Final Localized Significance Threshold Methodology.* July.

proposed project would be five acres.[16] For the operational threshold, the maximum daily LST, which is based on a five-acre project site, would be used. **Table 4.2.F: South Coast Air Quality Management District Localized Significance Thresholds** lists the emissions thresholds that apply during project construction and operation.

Table 4.2.F: South Coast Air Quality Management District Localized Significance Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Construction	197.0	1,804.0	12.0	8.0
Operations	197.0	1,804.0	3.0	2.0

Source: SCAQMD (2008).
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District

4.2.5.3 Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project site are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 parts per million (ppm)
- California State 8-hour CO standard of 9 ppm

4.2.5.4 Health Risk Thresholds

Both the State and federal governments have established health-based ambient air quality standards for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual health risk exceeds a threshold considered to be a prudent risk management level.

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximally exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 30 years for adults and 9 years for

[16] South Coast Air Quality Management District (SCAQMD). n.d. *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed February 2026).

children in residential locations and over a period of 25 years for workers. The MICR calculations include multipathway consideration, when applicable.

The cumulative increase in MICR that is the sum of the calculated MICR values for all TACs would be considered significant if it would result in an increased MICR greater than 10 in 1 million (1×10^{-5}) at any receptor location.

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multipathway consideration, when applicable.

  The proposed project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level.

  The proposed project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

The SCAQMD *CEQA Air Quality Handbook*[17] states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 10 in 1 million. Based on guidance from SCAQMD in the document *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis,*[18] for the purposes of this analysis, the threshold of 10 in 1 million was used as the cancer risk threshold for the proposed project.

4.2.6 Project Impacts

As discussed in Section 3.3 of the Initial Study (**Appendix B**), the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (Threshold 4.2.4). Therefore, this topic is not discussed further in this Draft EIR.

Threshold 4.2.1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact.

Discussion of Effects: An AQMP consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the information provided in air quality management plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of a project under consideration at a stage

[17] South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook.* Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed February 2026).

[18] South Coast Air Quality Management District (SCAQMD). 2003. *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*. August.

early enough to ensure that air quality concerns are addressed. Because air quality management plans are based on development projections from land use designations depicted and described in local General Plans, only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review.

Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*, consistency with the 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standard violation or cause a new violation, and (2) is consistent with the growth assumptions in the 2022 AQMP.

The proposed project's consistency with these criteria is discussed below:

1. **Consistency with Air Quality Standards:** The proposed project would result in short-term construction and long-term operational pollutant emissions. However, as demonstrated under Threshold 4.2.2 in **Table 4.2.I: Project Construction Emissions**, and **Table 4.3.J: Project Operational Emissions**, the proposed project would not exceed the significance criteria for daily VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, construction and operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. Accordingly, the proposed project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. **Consistency with AQMP Growth Assumptions:** The SCAQMD *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed project is not defined as a significant project pursuant to the SCAQMD *CEQA Air Quality Handbook*. The proposed project would include an amendment to the NWOS Specific Plan in order to develop the Legacy Ranch on the project site. In addition, the proposed project would be subject to a Conditional Use Permit (CUP) to allow the operation of the event venues which would include activities such as live entertainment, music, and dancing, food/beverage service and alcohol sales.

   The projections in the AQMP for achieving air quality goals are based, in part, on assumptions in Connect SoCal regarding population, housing, and growth trends, as well as assumptions and projections of local planning agencies to determine control strategies for regional compliance status. These forecasts anticipate continued growth within San Juan Capistrano, including increases in households and employment through 2050. According to Connect SoCal, the City's households and employment are forecasted to increase by approximately 2,800 households and 9,500 jobs, respectively, between 2019 and 2050.[19] The City's General Plan does not identify a

[19] Southern California Association of Governments (SCAG). 2024. 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy. Demographics and Growth Forecast, Technical Report, Table 13. Adopted April 4, 2024.

specific buildout date, and development timing is dependent on market conditions and property owner initiative.

Operation of the proposed project would generate approximately 60 full-time jobs, with additional part-time employment opportunities associated with future events at the project site. However, it is unlikely that these jobs would incite substantial population growth as these new jobs are anticipated to be filled by local residents or residents in the surrounding communities. In addition, the proposed project would include permanent equestrian caretaker residences. The equestrian caretakers in residence would be anticipated to come from the surrounding area and would not result in a significant increase in population within the city or the region.

Based on Connect SoCal, the 60-full time jobs would represent less than 1 percent[20] of the job growth anticipated in San Juan Capistrano by 2050. Therefore, the proposed project would not incite substantial population growth in the vicinity of the project site or within the city. The project's growth potential falls within the range of development assumed by regional planning projections and would not result in growth beyond that anticipated in the AQMP.

Conclusion. Based on the consistency analysis presented above, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Impacts associated with conflicts with the applicable air quality plan would be **less than significant**, and no mitigation is required.

Threshold 4.2.2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact.

Discussion of Effects: The Basin is currently designated as nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is in nonattainment for the federal PM_{10} standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis

[20] LSA. 2025. *Initial Study for the Northwest Open Space Legacy Ranch Project, San Juan Capistrano, California – Section 3.14, Population and Housing*. November.

assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, ROG, directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter.

Project construction activities would include demolition, grading, site preparation, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403: Fugitive Dust, which would require the Applicant to implement measures that would reduce the amount of particulate matter generated during the construction period.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, VOCs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Table 4.2.G: Tentative Project Construction Schedule lists the tentative project construction schedule based on a 3-year construction duration. **Table 4.2.H: Diesel Construction Equipment Utilized by Construction Phase** lists the potential construction equipment to be used during project construction under each phase of construction. Construction-related emissions are presented in **Table 4.2.I: Project Construction Emissions**. CalEEMod output sheets are included in **Appendix C**.

Table 4.2.G: Tentative Project Construction Schedule

Phase Number	Phase Name	Phase Start Date	Phase End Date	Number of Days/Week	Number of Days
1	Demolition	6/4/2029	6/29/2029	5	20
2	Site Preparation	7/2/2029	2/8/2030	5	160
3	Grading	2/11/2030	9/20/2030	5	160
4	Building Construction	9/23/2030	11/14/2031	5	300
5	Paving	11/17/2031	2/6/2032	5	60
6	Architectural Coating	2/9/2032	6/11/2032	5	90

Source: Compiled by LSA (May 2026).

Table 4.2.H: Diesel Construction Equipment Utilized by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	1	8	33	0.73
	Excavators	3	8	36	0.38
	Rubber Tired Dozers	2	8	367	0.4
Site Preparation	Rubber Tired Dozers	3	8	367	0.4
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Excavators	2	8	36	0.38
	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.4
	Scrapers	2	8	423	0.48
	Tractors/Loaders/Backhoes	2	8	84	0.37
Building Construction	Cranes	1	7	367	0.29
	Forklifts	3	8	82	0.2
	Generator Sets	1	8	14	0.74
	Tractors/Loaders/Backhoes	3	7	84	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	81	0.42
	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48

Source: Compiled by LSA (May 2026).
CalEEMod = California Emissions Estimator Model

Table 4.2.I: Project Construction Emissions

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	0.8	17.4	18.9	<0.1	1.1	0.8
Site Preparation	0.9	24.1	29.1	<0.1	8.8	4.8
Grading	1.2	30.4	36.2	0.1	5.1	2.6
Building Construction	0.7	13.6	18.0	<0.1	1.7	0.8
Paving	0.7	8.7	11.1	<0.1	0.6	0.4
Architectural Coating	20.3	1.1	1.4	<0.1	0.2	0.1
Maximum (lbs/day)	**20.3**	**30.4**	**36.2**	**0.1**	**8.8**	**4.8**
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (May 2026).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in **Table 4.2.I**, construction emissions associated with the project would not exceed the SCAQMD thresholds for VOCs, NO_X, CO, SO_X, $PM_{2.5}$, or PM_{10} emissions. Therefore, construction of the proposed project would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be **less than significant**, and no mitigation is required.

Operational Air Quality Impacts. Long-term air pollutant emission impacts are those typically associated with mobile sources (e.g., vehicle trips and truck trips), energy sources (e.g., electricity), area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. Major sources of energy demand for the proposed project include building mechanical systems, such as heating and air conditioning.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment.

The resulting estimated project operational emissions are shown in **Table 4.2.J: Project Operational Emissions** below. CalEEMod output sheets are included in **Appendix C.**

Table 4.2.J: Project Operational Emissions

Emission Type	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	2.9	2.0	23.4	0.1	6.9	1.8
Area Sources	6.7	0.2	9.7	<0.1	0.3	0.3
Energy Sources	<0.1	0.4	0.3	<0.1	<0.1	<0.1
Total Proposed Project Emissions	**9.6**	**2.6**	**33.4**	**0.1**	**7.2**	**2.1**
SCAQMD Thresholds	**55.0**	**55.0**	**550.0**	**150.0**	**150.0**	**55.0**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (May 2026).
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in **Table 4.2.J**, emissions associated with the proposed project would not exceed the significance criteria for VOCs, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ emissions; thus, the proposed project would not have a significant effect on regional air quality. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under an applicable federal or State ambient air quality standard. Impacts would be **less than significant**, and no mitigation is required.

Long-Term Microscale (CO Hot Spot) Analysis. Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Mission Viejo Station, the closest monitoring station to the project site, showed a highest recorded 1-hour concentration of 2.8 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 2.4 ppm (the State standard is 9 ppm) during the past 3 years (**Table 4.2.D**). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

As described in Section 4.11, Transportation, the proposed project would generate 75 a.m. peak hour trips and 123 p.m. peak-hour trips. Implementation of the proposed project would not substantially increase traffic volumes at study area intersections, nor would it degrade intersection operations below acceptable LOS thresholds. As described in Section 4.11, Transportation, all study area intersections are anticipated to operate at satisfactory levels of service. Because no study area intersection would operate at LOS E or LOS F, and the project would not result in a measurable degradation in intersection performance, the proposed project would not result in the high traffic volumes or substantial congestion conditions typically associated with localized CO concentration increases.

Therefore, given the extremely low level of CO concentrations in the vicinity of the project site, and lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to result in the CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations. Impacts would be **less than significant**, and no mitigation is required.

Threshold 4.2.3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact.

Discussion of Effects: Construction of the project would require the use of diesel-fueled equipment, which could be a source of toxic air contaminants. Additionally, during project operation, diesel fueled trucks would operate on the project site.

The SCAQMD defines structures that house persons (e.g., children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise) or places where persons gather (i.e., residences, schools, playgrounds, child-care centers, convalescent centers, retirement homes, and athletic fields) as sensitive receptors. Sensitive receptors are defined as people who have an increased sensitivity to air pollution or environmental contaminants. Although not sensitive receptors, this discussion includes an analysis of health impacts to nearby worker receptors (i.e., employees in nearby businesses) to ensure that people working close to the proposed project would not be exposed to substantial pollutant concentrations. The closest sensitive receptors to the project site are residential uses including single-family homes, which are located adjacent to the northern property line at approximately 45 feet from the project site's northern boundary to the residence property line. Other nearby sensitive receptors include the Groves Apartments located south of the project site at approximately 162 feet. The closest worker receptor to the project site is located at Farmakis Farms, approximately 82 feet immediately east of the project site. The closest school receptor to the project site is the JSerra Catholic High School located south of the project site, across Camino Capistrano, at approximately 170 feet away.

Health Risk on Nearby Sensitive Receptors. The following sections describe the potential impacts on sensitive receptors from construction and operation of the proposed project, which is based on the results of an HRA prepared for the project. The HRA analysis and results are presented below. Model inputs, detailed construction and operational data, and other details are also included in **Appendix D.**

Construction Health Risk Assessment. A construction HRA, which evaluates construction-period health risk to off-site receptors, was completed for the proposed project. The construction HRA used a dispersion model to translate emission rates from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the United States Environmental Protection Agency (USEPA) dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data. Detailed methodology is included in Section 4.2.4, Methodology, above.

Table 4.2.K: Health Risks from Project Construction to Off-Site Receptors, below, identifies the results of the analysis at the maximally exposed individual (MEI), who is a hypothetical individual who—because of realistically assumed proximity, activities, and living habits—would receive the highest exposure of a pollutant.

Table 4.2.K: Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential MEI	7.32	<0.01	0.00
Worker MEI	0.27	0.01	0.00
School MEI	0.86	<0.01	0.00
SCAQMD Significance Threshold	**10 in 1 million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: Compiled by LSA (May 2026).
MEI = maximally exposed individual
SCAQMD = South Coast Air Quality Management District

As shown in **Table 4.2.K**, the maximum cancer risk for the residential MEI would be 7.32 in 1 million, the worker MEI would be 0.27 in 1 million, and the school MEI would be 0.86 in 1 million, which would not exceed the SCAQMD cancer risk threshold of 10 in 1 million. The total chronic HI would be less than 0.01 for both the residential and school MEI, and 0.01 for the worker MEI, which is below the threshold of 1.0. In addition, the total acute HI would be nominal (0.00), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed project would not cause an exceedance of the SCAQMD health risk thresholds and would not result in the exposure of nearby sensitive receptors to substantial pollutant concentrations. Impacts resulting from the exposure of sensitive receptors to substantial pollutant concentrations during construction would be less than significant, and no mitigation would be required.

Operational Health Risk Assessment. The proposed project would develop the Legacy Ranch with several distinct land uses organized into seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and

Trails/Natural Core, while preserving the existing uses on site including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village.

The OEHHA *Air Toxic Hot Spots Program Risk Assessment Guidelines*[21] determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. In addition, CARB has also identified DPM emitted by off-road and diesel-fueled engines as a TAC.[22] Accordingly, the TAC of concern would be DPM associated with the use of diesel engines during project construction and operation. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. HRA analyses typically use PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance.

Operational activities associated with the proposed project would be primarily recreational and open-space related, including horseback riding, equine therapy, community events, weddings, agricultural programming, nature recreation, and limited catering/food-service operations. The proposed project would not introduce stationary sources of TACs, such as diesel generators, boilers, fuel-combustion equipment, or industrial operations. Routine project operations would involve light-duty vehicle trips from visitors, staff, and service vendors. TAC emissions from project operation would be limited to intermittent on-site vehicle circulation, limited maintenance vehicle activity, and occasional vendor or service truck visits. These activities are not anticipated to generate substantial quantities of diesel particulate emissions, and their frequency and duration would not result in sustained exposure that could elevate long-term cancer risk.

In addition, all on-road and off-road vehicles accessing the project site would be subject to stringent State and federal emission regulations that substantially reduce exhaust pollutants, including DPM. These requirements include the CARB's on-road heavy-duty diesel engine standards and the Truck and Bus Regulation, which phase in particulate filters and 2010-model-year–equivalent engines; the In-Use Off-Road Diesel Vehicle Regulation for construction and maintenance equipment; and CARB's anti-idling limits, which limits vehicle idling to 5 minutes. Collectively, these rules ensure that all vehicles and equipment operating at the project site would generate lower DPM and TAC emissions compared to older, uncontrolled engines.

Furthermore, as identified in **Table 4.2.J**, project operational emissions of criteria pollutants would be below SCAQMD significance thresholds; thus, they are not likely to have a significant impact on sensitive receptors. Once the proposed project is constructed, it would not be a source of substantial TAC emissions. Therefore, implementation of the proposed project would not result in new sources of TACs and would not expose sensitive receptors to substantial levels of TACs. Impacts would be **less than significant,** and no mitigation is required.

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21 California Environmental Protection Agency Office of Environmental Health Hazard Assessment. 2015. *Air Toxic Hot Spots Program – Risk Assessment Guidelines*. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf (accessed February 2026)

22 California Air Resources Board (CARB). 2025. Overview: Diesel Exhaust and Health. Website: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health (accessed February 2026)

Localized Significance Analysis. The SCAQMD regional significance thresholds are intended to evaluate regional air quality impacts associated with project emissions. Because regional thresholds are based on total mass emissions (pounds per day) and do not evaluate pollutant concentrations at specific receptor locations, SCAQMD developed LSTs to assist lead agencies in evaluating potential localized air quality impacts.

LSTs evaluate whether project-generated emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ from on-site sources could result in localized concentrations that would exceed the most stringent applicable State or federal ambient air quality standards at nearby sensitive receptors. LSTs are based on dispersion modeling conducted by SCAQMD and account for emission rates, project size, and receptor distance.

This analysis evaluates localized construction and operational impacts using SCAQMD LST screening tables for Source Receptor Area (SRA) 21, assuming an 82-foot (25-meter) source-receptor distance and a 5.0-acre disturbance area. Project on-site emissions were estimated using CalEEMod and compared to applicable LST screening thresholds.

Construction Localized Significance Analysis. **Table 4.2.L: Project Localized Construction Emissions (lbs/day)** presents estimated on-site construction emissions and applicable LSTs. As shown, construction emissions would not exceed the LSTs for NO_X, CO, PM_{10} or $PM_{2.5}$. Therefore, construction of the proposed project would not result in a locally significant air quality impact.

Table 4.2.L: Project Localized Construction Emissions (lbs/day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
Proposed Project On-Site Emissions	30.3	35.4	8.6	4.8
Localized Significance Threshold	197.0	1,804.0	12.0	8.0
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (May 2026).
Note: Source Receptor Area 21, based on a 5.0-acre construction disturbance daily area, at a distance of 82 feet from the project site boundary.
CO= carbon monoxide
lbs/day = pounds per day
NO_x= nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

Operational Localized Significance Analysis. The localized significance thresholds only apply to emissions from on-site sources to off-site receptors; however, the CalEEMod outputs do not separate the on-site emissions from stationary sources and the off-site emissions from mobile sources. For a worst-case scenario assessment, the emissions detailed in **Table 4.2.M: Project Localized Operational Emissions (lbs/day)** assume all area and energy source emissions would occur on site, and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related on-site vehicle travel, would occur on site. Considering the total trip length included in CalEEMod, the 5 percent assumption is conservative.

Table 4.2.M shows that the localized operational emissions would not exceed applicable LST screening thresholds for NO_X, CO, PM_{10} or $PM_{2.5}$. Therefore, the proposed operational activity would not result in a locally significant air quality impact. Impacts would be less than significant, and no mitigation is required.

Table 4.2.M: Project Localized Operational Emissions (lbs/day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
Proposed Project On-Site Emissions	0.7	11.2	0.6	0.4
Localized Significance Threshold	197.0	1,804.0	3.0	2.0
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (May 2026).
Note: Source Receptor Area 21, based on a 5.0-acre operational daily area, at a distance of 82 feet from the project site boundary.
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

Consistent with *State CEQA Guidelines* Section 15064 and applicable case law, this analysis evaluates both regional and localized air quality impacts using SCAQMD-approved quantitative methodologies and significance thresholds, which are designed to protect public health and welfare. Because project emissions would remain below applicable regional and localized significance thresholds, the project would not result in pollutant concentrations that would exceed air quality standards established to protect sensitive populations. Therefore, the project would not result in significant adverse health-related air quality impacts. Impacts would be **less than significant**, and no mitigation is required.

4.2.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for air quality. The cumulative study area analyzed for potential air quality impacts is the Basin, and includes the cumulative projects listed in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures. Each project in the Basin is required to comply with SCAQMD rules and regulations and is subject to independent review.

The Basin is currently designated nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is currently designated nonattainment for the federal and State ozone and $PM_{2.5}$ standards, and the State PM_{10} standard. Existing nonattainment conditions result from the combined emissions of past, present, and reasonably foreseeable future development within the region.

Because air pollution is cumulative by nature, a project's incremental contribution to cumulative air quality impacts is evaluated based on whether project emissions are cumulatively considerable. In developing its regional significance thresholds, SCAQMD identified emission levels at which a project's contribution would be considered cumulatively considerable. Projects that exceed these thresholds are considered to make a significant contribution to cumulative regional air quality impacts.

As shown in **Table 4.2.I** and **Table 4.2.J**, construction and operational emissions associated with the proposed project would not exceed applicable SCAQMD regional significance thresholds. Accordingly, the proposed project would not result in a cumulatively considerable contribution to

regional criteria pollutant emissions, and cumulative impacts related to regional air quality would be less than significant.

With respect to TACs, construction-related diesel particulate matter emissions associated with the proposed project could contribute to localized cumulative health risk exposure at nearby sensitive receptors. As shown in **Table 4.2.K**, construction of the proposed project would not cause an exceedance of the SCAQMD health risk thresholds and would not result in the exposure of nearby sensitive receptors to substantial pollutant concentrations. Once operational, the proposed project would not be a source of substantial TAC emissions. Therefore, the proposed project would not make a cumulatively considerable contribution to TAC-related health risks, and cumulative impacts related to TAC exposure would be **less than significant**.

Overall, the cumulative air quality impacts with implementation of the proposed project would be less than cumulatively considerable.

4.2.8 Level of Significance Prior to Mitigation

There would be no potentially significant impacts related to air quality with implementation of the proposed project.

4.2.9 Regulatory Compliance Measures and Mitigation Measures

4.2.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.2.9.2 Mitigation Measures

No mitigation measures are required.

4.2.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to air quality, and no mitigation is required.

4.3 BIOLOGICAL RESOURCES

This section describes existing biological conditions on the project site and in the surrounding area and identifies potentially significant impacts to biological resources that may result from implementation of the proposed project. The information in this section is based, in part, on the Biological Resources Assessment (BRA) prepared by LSA in June 2026.[1] This report is provided as **Appendix E**.

4.3.1 Scoping Process

The City of San Juan Capistrano (City) received two comments during the scoping period for this Draft EIR (November 13 through December 15, 2025) concerning the proposed project's potential impacts on biological resources, as discussed below. In addition, one comment pertaining to biological resources was submitted during the public scoping meeting held on November 19, 2025, as discussed below:

- Chandler Almquist, November 19, 2025, requested the EIR discuss project impacts on plants and animals.

- Larry Kramer, December 9, 2025, raised concerns related to impacts to Trabuco Creek due to contamination by horses and due to construction of the proposed pedestrian bridge.

- California Department of Fish and Wildlife (CDFW), December 15, 2025, outlined the CDFW's role as a Trustee Agency for fish and wildlife resources and states that the proposed project could result in impacts to biological resources and special-status species, including Crotch's bumblebee, white-tailed kite, coastal California gnatcatcher, least Bell's vireo; nesting birds; and the water quality of Trabuco Creek. CDFW recommended surveys and mitigation to address these potential impacts. CDFW also requested the Draft EIR include a discussion of impacts from equestrian uses, cattle, rodenticides, herbicides, pesticides, alternatives to the proposed project, and cumulative impacts. In addition, CDFW provided guidelines for the biological resources assessment and permits that may be required. Lastly, CDFW requests that all environmental data be submitted to CDFW and states that filing fees will be required.

Scoping comments are provided in **Appendix A** of this Draft EIR.

4.3.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, Orange County. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, senior living residential community (The Groves Apartments) to the south, and an Orange County Transportation Authority-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route. West of Interstate 5 (I-5) and east of Camino Capistrano bounding the project site are a Christmas tree farm and farmers market, and healthcare facilities (Camino Health Center and Kaiser Permanente). To the south and southeast of the project site lies JSerra

[1] LSA. 2026. *Biological Resources Assessment, Legacy Ranch Project, City of San Juan Capistrano*. May.

Catholic High School and two gas stations with convenience markets. Further south of the project site is an assisted living community (Silverado San Juan Capistrano Memory Care). East of the I-5 freeway lies predominantly single-family residential uses, with office commercial uses generally southeast of the I-5 freeway. Rosenbaum Ranch Market, a firewood retailer, is located directly east across I-5 from the Swanner house. Undeveloped open space lies directly to the west of the project site, with single-family residential uses on adjacent hillsides in the City of Laguna Niguel.

The irregularly shaped project site is currently developed with the historic Roger Y. Williams/ Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site and there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site.

Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano with Oso Creek located west of the railroad tracks. Trabuco Creek flows generally north to south and is located along the eastern boundary of the project site parallel to Camino Capistrano. The upstream portion of Trabuco Creek, where it crosses under Camino Capistrano, is channelized. Trabuco Creek is a soft-bottom channel through most of the project site. Just downstream of the project site, where Trabuco Creek flows down the slope under the railroad tracks, it is reinforced with grouted riprap. However, at the bottom of the slope (off-site), Trabuco Creek is a soft-bottom channel.

In addition, an unnamed tributary to Trabuco Creek (Tributary 1) is located on the eastern portion of the project site, south of the existing barn and associated storage containers. Approximately 14 acres of the project site, encompassing Trabuco Creek, its banks, and the tributary are covenanted with conservation easements. Another concrete lined tributary (Tributary 2) to Trabuco Creek, lies further to the south on the project site. The two tributaries are discussed in greater detail in Section 4.3.2.6, Jurisdictional Aquatic Resources.

4.3.2.1 Vegetation

The majority of the project site is developed or disturbed with existing or past uses (e.g., Swanner House, Putuidem Village, Dr. Joe Cortese Dog Park, parking areas, agriculture, and farm structures). Much of the central and southern portion of the project site (north of Trabuco Creek) appear to be routinely cleared of vegetation and currently consist of ruderal (weedy) species with scattered native and nonnative trees. The majority of native vegetation types found on the project site are present along Trabuco Creek and the associated Trabuco Creek Trail. Coastal sage scrub and coast live oak woodland vegetation types are present in upland areas along both sides of the Trabuco Creek Trail and on the upper banks of Trabuco Creek, while riparian vegetation types are located along Trabuco Creek. Vegetation types mapped on the project site are described below. The acreages of each vegetation and land cover type occurring on the project site are shown in **Table 4.3.A: Vegetation Communities and Land Cover Types Within the Project Site**. **Table 4.3.A** also indicates whether the vegetation type is a sensitive natural community. A map of the vegetation and land cover types on the project site is provided as Figure 5 in the BRA (**Appendix E**).

Table 4.3.A: Vegetation Communities and Land Cover Types Within the Project Site

Vegetation or Land Cover Type	Total Vegetation on Project Site (Acres)	Sensitive Natural Community (Yes/No)
Scrub		
Sagebrush–Buckwheat Scrub	3.81	No
Sagebrush Scrub	0.42	No
Coyote Brush Scrub	0.14	No
Encelia Scrub	1.13	**Yes**[1]
Sage Scrub–Grassland Ecotone	0.19	No
Subtotal	*5.69*	
Grassland		
Ruderal	26.91	No
Subtotal	*26.91*	
Riparian		
Willow Riparian Scrub	0.56	**Yes**
Disturbed Mulefat Scrub	0.06	No
Sycamore Riparian Woodland	4.48	**Yes**
Coast Live Oak Riparian Forest	2.60	**Yes**
Arroyo Willow Riparian Forest/Black Willow Riparian Forest	1.38	**Yes**
Subtotal	*9.08*	
Woodland		
Coast Live Oak Woodland	2.90	No
Coast Live Oak Woodland/Ruderal	2.40	No
Mexican Elderberry Woodland	0.13	**Yes**
Subtotal	*5.43*	
Watercourses		
Flood Control Channel	1.27	--[3]
Subtotal	*1.27*	
Agriculture		
Irrigated Agriculture	1.18	--
Subtotal	*1.18*	
Developed		
Rural	12.01	--
Ornamental Landscaping	1.60	--
Subtotal	*13.61*	
Disturbed		
Cleared or Graded	2.30	--
Subtotal	*2.30*	
Total	***65.47***	--

Source: LSA (2026).

[1] On the project site, this vegetation type appears to be planted revegetation

[2] Provisional: A vegetation type has been proposed based on limited data (few recorded occurrences), but requires further research to validate that the limited occurrences are based on its rarity rather than lack of data.

[3] Not applicable; nonnative vegetation and developed land covers are not included on the List of Sensitive Natural Communities.

The vegetation communities and land cover are discussed in more detail below.

Scrub. The following provides a description of the scrub vegetation communities found within the project site.

- **Sagebrush-Buckwheat Scrub:** This community is found along the Trabuco Creek Trail and along the upper slopes of Trabuco Creek and is dominated by California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*), interspersed with other shrubs such as laurel sumac (*Malosma laurina*), toyon (*Heteromeles arbutifolia*), and black sage (*Salvia mellifera*). Other species within this community include coast goldenbush (*Isocoma mensiezii*), tarragon (*Artemisia dracunculus*), and scalebroom (*Lepidospartum squamatum*).

  Sagebrush-buckwheat scrub is consistent with the *Artemisia californica – Eriogonum fasciculatum* association in *A Manual of California Vegetation*. This association is not considered a sensitive natural community by CDFW; however, sagebrush-buckwheat scrub is protected by the Orange County Central-Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP).

- **Sagebrush Scrub:** This community is found within the Putuidem Village, and is dominated by California sagebrush. This area consists of a planted native garden; vegetation cover is relatively sparse compared to coastal sage scrub elsewhere on the project site and it includes some species not expected to occur naturally within the project site, such as Coulter's matilija poppy (*Romneya coulteri*) and manzanita (*Arctostaphylos* sp.).

  Sagebrush scrub is consistent with the *Artemisia californica* association in *A Manual of California Vegetation*. This association is not considered a sensitive natural community by CDFW; however, sagebrush scrub is protected by the NCCP/HCP.

- **Coyote Bush Scrub:** This community is dominated by coyote brush (*Baccharis pilularis*) and is present in a few small polygons along the edges of ruderal habitat. Other species that also occur in this community include blue elderberry (*Sambucus mexicana*) and mule fat (*Baccharis salicifolia*).

  Coyote brush scrub is consistent with the *Baccharis pilularis* association in *A Manual of California Vegetation*. This association is not considered a sensitive natural community by CDFW' however, coyote brush scrub is protected by the NCCP/HCP.

- **Encelia Scrub:** This community is found east of the Dr. Joe Cortese Dog Park and is dominated by California bush sunflower (*Encelia californica*). Other species that occur include California sagebrush, mule fat, and giant wild rye (*Leymus condensatus*). Based on the location, density, and species composition, this community appears to have been planted.

  Encelia scrub is consistent with the *Encelia californica – Artemisia californica* association in *A Manual of California Vegetation*. This association is considered a sensitive natural community by CDFW; however, based on the species composition and location, the area appears to have been planted. As confirmed in a review of Google Earth historic imagery; it was a disturbed/ruderal

area before 2014 and after this date, appears to be coastal sage scrub. Encelia scrub is protected by the NCCP/HCP.

- **Sage Scrub–Grassland Ecotone:** This community is found in a small area east of Trabuco Creek and also in the southern portion of the project site on the western banks of Trabuco Creek. The area east of Trabuco Creek consists of a low cover of coast goldenbush and coyote brush mixed with ruderal species. The southern area consists of a low cover of California sagebrush and California buckwheat in an opening at the edge of the sycamore riparian woodland.

  Sage scrub–grassland ecotone is consistent with the *Artemisia californica* association mixed with the *Avena* spp. – *Bromus* spp. semi-natural alliance in *A Manual of California Vegetation*. These alliances and associations are not considered sensitive natural communities by CDFW; however, sage scrub–grassland is protected by the NCCP/HCP.

Grassland. The following provides a description of the grassland vegetation community found within the project site.

- **Ruderal Grassland:** Ruderal grassland is the most common vegetation community on the project site, comprising much of the central and western portion of the project site. Ruderal grassland consists of regularly disturbed (e.g., disked or mowed) areas dominated by weedy, pioneering, and often nonnative plant species such as garland chrysanthemum (*Glebionis coronata*), shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), ripgut brome (*Bromus diandrus*), and artichoke thistle (*Cynara cardunculus*). Isolated larger shrubs are scattered throughout this area, including both native species such as coast live oak (*Quercus agrifolia*) and blue elderberry, and nonnative, fruit-producing species such as citrus (*Citrus sinensis*) and avocado (*Persea americana*). However, these species did not warrant mapping as a separate community because they do not form a closed canopy.

  Ruderal grassland is consistent with the *Brassica nigra – Centaurea melitensis* semi-natural alliance in *A Manual of California Vegetation*. This alliance is not considered a sensitive natural community by CDFW.

Riparian. The following provides a description of the riparian vegetation communities found within the project site.

- **Willow Riparian Scrub:** This community is found along the northern portion of Trabuco Creek within the flood control channel. Dominant species in this community include small-stature arroyo willow (*Salix lasiolepis*) and mule fat. Other species that also occur include Spanish false fleabane (*Pulicaria paludosa*), tall flatsedge (*Cyperus eragrostis*), and broadleaf cattail (*Typha latifolia*).

  Willow riparian scrub is consistent with the *Salix lasiolepis* association in *A Manual of California Vegetation*. This association is considered a sensitive natural community by CDFW. Additionally, this area is along Trabuco Creek, which is under the jurisdiction of the resource agencies (i.e., CDFW, U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB],

and U.S. Fish and Wildlife Service [USFWS]) (discussed further below in Section 4.3.2.6, Jurisdictional Aquatic Resources).

- **Disturbed Mulefat Scrub:** A small patch of mule fat is present in an upland area at the eastern edge of the project site, adjacent to Camino Capistrano. Spanish false fleabane occurs in the understory.

  Disturbed mulefat scrub is consistent with the *Baccharis salicifolia* association in *A Manual of California Vegetation*. This association is not considered a sensitive natural community by CDFW.

- **Sycamore Riparian Woodland (7.4):** This community is found along the southern portion of Trabuco Creek, upstream of the railroad overcrossing. The canopy within this habitat is dominated by mature western sycamore (*Platanus racemosa*), with other riparian tree species largely confined to the lower canopy. Other dominant species include arroyo willow, Goodding's black willow (*Salix gooddingii*), and coast live oak. Western white clematis (*Clematis ligusticifolia*) was noted in the understory.

  Sycamore riparian woodland is consistent with the *Platanus racemosa – Salix laevigata / Salix lasiolepis – Baccharis salicifolia* association in *A Manual of California Vegetation*. This association is considered a sensitive natural community by CDFW. Additionally, this area is along Trabuco Creek and Tributary 2, which are under the jurisdiction of the resource agencies, discussed further below in Section 4.3.2.6, Jurisdictional Aquatic Resources.

- **Coast Live Oak Riparian Forest:** This community is found immediately downstream of the channelized portion of Trabuco Creek and also occurs along a tributary (Tributary 1) that flows from under Camino Capistrano to Trabuco Creek. This community is dominated by coast live oak and western sycamore as codominant tree species, with both arroyo and black willow in the lower canopy. Understory species include poison hemlock (*Conium maculatum*), Spanish false fleabane, pale spikerush (*Eleocharis macrostachya*), and rabbitsfoot grass (*Polypogon monspeliensis*), western ragweed (*Ambrosia psilostachya*), California mugwort (*Artemisia douglasiana),* and mule fat.

  Coast live oak riparian forest is consistent with the *Platanus racemosa – Quercus agrifolia* association in *A Manual of California Vegetation*. This association is considered a sensitive natural community by CDFW. Additionally, this area is along Trabuco Creek and Tributary 1, which are under the jurisdiction of the resource agencies (discussed further below Section 4.3.2.6, Jurisdictional Aquatic Resources).

- **Arroyo Willow Riparian Woodland/Black Willow Riparian Woodland:** This community is found along the central stretch of Trabuco Creek where the canopy is dominated by arroyo willow and black willow. The understory species are similar to those described under coast live oak riparian forest.

  Arroyo willow riparian woodland/black willow riparian woodland is consistent with the *Salix lasiolepis* and *Salix gooddingii* associations in *A Manual of California Vegetation*. Both of these associations are considered sensitive natural communities by CDFW. Additionally, this area is

along Trabuco Creek and Tributary 2, which are under the jurisdiction of the resource agencies (discussed further below in Section 4.3.2.6, Jurisdictional Aquatic Resources).

Woodland. The following provides a description of the woodland vegetation communities found within the project site.

- **Coast Live Oak Woodland:** This community is along the upper banks of Trabuco Creek and along the Trabuco Creek Trail. It is dominated by coast live oak. Woodland located nearer to the creek has an understory dominated by California sagebrush, blue elderberry, California buckwheat, and mule fat.

  Coast live oak woodland is consistent with the *Quercus agrifolia* association in *A Manual of California Vegetation*. This association is not considered a sensitive natural community by CDFW.

- **Coast Live Oak Woodland/Ruderal:** This community is located west of the Trabuco Creek Trail and consists of scattered coast live oak trees with ruderal or bare understory.

  Coast live oak woodland/ruderal is consistent with the *Quercus agrifolia* association mixed with the *Brassica nigra – Centaurea melitensis* semi-natural alliance in *A Manual of California Vegetation*. These associations and alliances are not considered sensitive natural communities by CDFW.

- **Mexican Elderberry Woodland:** This community is found in small patches in the ruderal grassland, where several blue elderberry grow in loose or tight stands. In some stands, citrus trees are mixed with the blue elderberry.

  Mexican elderberry woodland is consistent with the *Sambucus nigra* Upland association in *A Manual of California Vegetation*. This association is considered a provisional sensitive natural community by CDFW. Provisional associations have been proposed based on the current limited amount data (i.e., few recorded occurrences) but require further research to validate that the limited amount of occurrence is based on its rarity and not lack of data.

Watercourses. The following provides a description of the watercourse vegetation community found within the project site.

- **Flood Control Channel:** The portion of Trabuco Creek south of Camino Capistrano is channelized within a concrete and rip-rap lined channel.

  Because flood control channels are unvegetated, there is no corresponding vegetation association in *A Manual of California Vegetation*. However, this area is along Trabuco Creek, which is under the jurisdiction of the resource agencies (discussed further below in Section 4.3.2.6, Jurisdictional Aquatic Resources).

Agriculture. The following provides a description of the agricultural vegetation community found within the project site.

- **Irrigated Agriculture:** Irrigated agriculture is present north and west of the Swanner House where small fields of flowers and row crops are actively being irrigated and maintained. Because agriculture is not a natural or semi-natural community, there is no corresponding vegetation association in *A Manual of California Vegetation.*

Developed. The following provides a description of the developed land cover found within the project site.

- **Rural Development:** Areas mapped as rural development consist of the Swanner House, Dr. Joe Cortese Dog Park, the Village of Putuidem, and other abandoned buildings scattered on the project site. Developed areas on the project site include some associated ornamental vegetation, including planted citrus (*Citrus* spp.), eucalyptus (*Eucalyptus* sp.), and individual coast live oak trees.

  Ornamental vegetation associated with developed areas is consistent with the *Eucalyptus* (*globulus*, *camaldulensis*) association and the *Quercus agrifolia* association in *A Manual of California Vegetation*. It is not considered a sensitive natural community by CDFW.

- **Ornamental Landscaping:** This vegetation community is comprised of nonnative, generally planted in the vicinity of the developed areas. There is also a portion of eastern bank of Trabuco Creek where ornamental tree species have washed down. Characteristic species within this community include eucalyptus, bougainvillea (*Bougainvillea* sp.), and acacia (*Acacia* sp.).

  Ornamental vegetation is consistent with the *Eucalyptus* (*globulus*, *camaldulensis*) association in *A Manual of California Vegetation*. It is not considered a sensitive natural community by CDFW.

Disturbed. The following provides a description of the disturbed land cover found within the project site.

- **Cleared or Graded:** Cleared or graded areas consist of dirt roads and trails such as the Trabuco Creek Trail. Because disturbed areas are unvegetated, there is no corresponding vegetation association in *A Manual of California Vegetation*.

4.3.2.2 Special-Status Plant Species

The literature review conducted as part of the BRA (**Appendix E**) identified 68 special-status plant species that have been reported from the project region (i.e., *Dana Point*, *San Juan Capistrano*, *San Clemente*, *Canada Gobernadora, and Laguna Beach* USGS quadrangles). Details on habitat requirements, range, and potential for occurrence are described for each species in Appendix E of the BRA (**Appendix E** of this Draft EIR). Of these, 62 species are not expected to occur due to lack of suitable habitat, because the project site is outside the species range, or because they were not observed during the focused survey. Species that have potential to occur on the project site are listed below.

Of the special-status plant species that have potential to occur within the project site, five California Rare Plant Rank (CRPR) 4 species have been observed on the project site during focused surveys to date (June 2026):

- San Diego sagewort (*Artemisia palmeri*, CRPR 4.2)
- San Diego viguiera (*Bahiopsis laciniata*, CRPR 4.3) [introduced]paniculate tarplant (*Deinandra paniculata*, CRPR 4.2)
- southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*, CRPR 4.2) [planted]Coulter's matilija poppy (*Romneya coulteri*, CRPR 4.2) [planted]

Locations of CRPR 4 species are being tracked by the CNPS and the CDFW. They are considered to be on a "watch list" but are not yet threatened or endangered in the project region. Two CRPR 4 species, San Diego sagewort and paniculate tarplant, were observed along Trabuco Creek. Southwestern spiny rush and Coulter's matilija poppy are planted in the native garden in Putuidem Village; no naturally occurring individuals were observed in habitat along Trabuco Creek (their expected habitat). San Diego County viguiera was observed in coastal sage scrub on the east side of Trabuco Creek, adjacent to Camino Capistrano. While this species is native to nearby San Diego County, populations in Orange County are believed to be introduced.

The following species has potential to occur on the project site; however, this species blooms later in the season so the focused survey has not yet been conducted (June 2026).

- white rabbit-tobacco (*Pseudognaphalium leucocephalum*, CRPR 2B.2)

4.3.2.3 Wildlife

The following provides a discussion of the wildlife species that were observed or expected to occur on the project site based on the field surveys conducted as part of the BRA (**Appendix E**).

Fish. Suitable habitat for fish is limited to Trabuco Creek and its tributary. No fish were observed during the field visit, but adaptable freshwater species, such as western mosquitofish (*Gambusia affinis*), are likely present within the site.

Amphibians. Within the project site, amphibians are expected to occur within Trabuco Creek as well as adjacent uplands. The only amphibian observed on the project site was the Baja California tree frog (*Pseudacris hypochondriaca*), a small species common in creeks and other waterways. The nonnative American bullfrog (*Lithobates catesbianus*) was heard from Trabuco Creek downstream of the project site. Other amphibians with potential to occur within the project site include California tree frog (*Pseudacris cadaverine*), western toad (*Anaxyrus boreas*), garden slender salamander (*Batrachoseps major*), and black-bellied slender salamander (*Batrachoseps nigriventris*).

Reptiles. Both the riparian and upland portions of the project site contain suitable habitat for a variety of reptile species, though the only species observed within the project site was the western fence lizard (*Sceloporus occidentalis*). Other species that can be expected within the project site include common side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis catenifer*) and southern Pacific rattlesnake (*Crotalus oreganus helleri*).

Birds. Bird species associated with riparian forest, oak woodlands, coastal sage scrub, ruderal grasslands, and developed areas are common within the project site, reflecting the diverse matrix of habitats within the project site.

Bird species characteristic of riparian forest observed within the project site include Cassin's kingbird (*Tyrannus vocierans*), common yellowthroat (*Geothlypis trichas*) and northern house wren (*Troglodytes aedon*). Other riparian species expected to occur within the project site include downy woodpecker (*Dryobates pubescens*), Bullock's oriole (*Icterus bullockii*) and song sparrow (*Melospiza melodia*).

Bird species characteristic of oak woodlands observed within the project site include oak titmouse (*Baeolophus inornatus*), Nuttall's woodpecker (*Dryobates nuttalli*) and Hutton's vireo (*Vireo huttonii*), and California scrub-jay (*Aphelocoma californica*). Other oak woodland species expected to occur within the project site include acorn woodpecker (*Melanerpes formicivorus*) and white-breasted nuthatch (*Sitta carolinensis*).

Bird species characteristic of coastal sage scrub present within the project site include wrentit (*Chamaea fasciata*) and spotted towhee (*Pipilo maculatus*). Other coastal sage scrub species expected to occur within the project site include California thrasher (*Toxostoma redivivum*) and Bewick's wren (*Thryomanes bewickii*).

Bird species characteristic of ruderal grasslands present within the project site include ash-throated flycatcher (*Myiarchus cinerascens*) and western kingbird (*Tyrannus verticalis*). Other species of this vegetation community expected to occur within the project site include Say's phoebe (*Sayornis saya*), American pipit (*Anthus rubescens*) and Savannah sparrow (*Passerculus sandwichensis*).

Bird species characteristic of developed areas present within the project site include black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus polyglottos*), and house finch (*Haemorhous mexicanus*). Other species of developed areas expected to occur within the project site include European starling (*Sturnus vulgaris*) and rock pigeon (*Columba livia*).

Mammals. The ruderal, woodland, and riparian habitats within the project site are expected to host a variety of mammal species, including both those resident within the project site and those using the site as a corridor between undeveloped areas to the east and west. The only mammal species observed within the project site included desert cottontail (*Sylvilagus audubonii*) and California ground squirrel (*Otospermophilus beecheyi*). Other mammals expected to occur on the project site include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), coyote (*Canis latrans*), Botta's pocket gopher (*Megascapheus bottae*) and bobcat (*Lynx rufus*).

4.3.2.4 Special-Status Wildlife Species

The literature review conducted as part of the BRA (**Appendix E**) identified 50 special-status wildlife species that have been reported from the project region. Details on habitat requirements, range, and potential for occurrence are described for each species in Appendix E of the BRA (**Appendix E** of this Draft EIR). Of the species reported from the region, 17 are not expected to occur due to lack of suitable habitat, or because the project site is outside of the range of the species. Species that have potential to occur on the project site are listed below.

The following species have been observed during the July 2025 general survey or subsequent focused survey visits in 2026:

- Crotch's bumble bee (*Bombus crotchii*, State Candidate Endangered [SCE])
- Southwestern pond turtle (*Actinemys pallida,* Federally Proposed Threatened [FPT], California Species of Special Concern [SSC])
- Coastal California gnatcatcher (*Polioptila californica californica,* Federally Threatened, SSC)
- Yellow warbler (*Setophaga petechia*, SSC)
- Yellow-breasted chat (*Icteria virens*, SSC)

The following species have a moderate to high potential to occur on the project site:

- orange-throated whiptail (*Aspidoscelis hyperthyra*, Special Animal)
- coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC)
- coast horned lizard (*Phrynosoma blainvillii*, SSC)
- California glossy snake (*Arizona elegans*, SSC)
- two-striped garter snake (*Thamnophis hammondii*, SSC)
- red diamond rattlesnake (*Crotalus ruber*, SSC)
- Cooper's hawk (*Astur cooperii*, Watch List [WL])
- white-tailed kite (*Elanus leucurus*, California Fully Protected)
- least Bell's vireo (*Vireo bellii pusillus*, Federally Endangered [FE], State Endangered [SE])
- yellow-breasted chat (*Icteria virens*, SSC)
- pallid bat (*Antrozous pallidus;* foraging only*,* SSC)
- western red bat (*Lasiurus blossevillii*, SSC)
- western mastiff bat (*Eumops perotis californicus;* foraging only, SSC)
- pocketed free-tailed bat (*Nyctinomops femorosaccus*, SSC)
- big free-tailed bat (*Nyctinomops macrotis*, SSC)
- San Diego desert woodrat (*Neotoma lepida intermedia*, SSC)

The following species have a low potential to occur on the project site:

- monarch butterfly (overwintering California population; *Danaus plexippus plexippus* pop. 1, FPT)
- arroyo chub (*Gila orcutti*, SSC)
- western spadefoot (*Spea hammondii*, FPT, SSC)
- Southern California legless lizard (*Anniella stebbinsi*, SSC)
- South Coast garter snake (*Thamnophis sirtalis* pop. 1*,* SSC)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*, SSC)
- long-eared owl (*Asio otus,* SSC)
- burrowing owl (*Athene cunicularia*, SCE)
- southwestern willow flycatcher (*Empidonax traillii extimus*, FE, State Endangered [SE])
- loggerhead shrike (*Lanius ludovicianus,* SSC)
- California horned lark (*Eremophila alpestris actia*, Watch List [WL])
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens,* WL)
- mountain lion (*Puma concolor,* State Threatened [ST])

Of the species listed above, those that have potential to occur and are federally or State listed, or candidates or proposed for listing, are discussed further below.

The **Crotch's bumble bee** is a Candidate for state listing as Endangered. It is a large, winged insect found in grasslands and coastal sage scrub in southern and central California. Favored nectar plants include black sage (*Salvia mellifera*), milkweeds (*Asclepias* spp.), and lupines (*Lupinus* spp.). Crotch's bumble bee has declined due to habitat loss, climate change, and the use of pesticides. This species has been reported from Riley Wilderness Park, Laguna Beach, Laguna Niguel, and near Camino del Avion in San Juan Capistrano. Suitable coastal sage scrub with black sage is present within the project site. This species has been observed on the project site during focused surveys.

Overwintering **monarch butterfly** sites have been proposed for federal listing as Threatened. The monarch is a large butterfly found throughout much of North America; in California, it is found across a variety of forest, scrub, and grassland communities, and uses milkweed as a host plant. Populations in California carry out a complex, multi-stage migration, with many individuals spending the winter months at coastal overwintering sites in Southern and Central California. The majority of overwintering sites are within a few miles of the immediate coast. This species has declined due to habitat loss, milkweed declines, and the use of pesticides. Overwintering populations have declined by more than 95% in the last 40 years. Potentially suitable overwintering habitat is present on the project site; however, no monarch overwintering sites are known from the project site. While the project site is more inland than the typical overwintering sites, historical overwintering sites are known from elsewhere in San Juan Capistrano.

The **Southern California Steelhead Distinct Population Segment** (DPS) is federally and state Endangered. The DPS encompasses steelhead (*Oncorhynchus mykiss irideus*) populations occurring in Southern California from the Santa Maria to Tijuana Rivers. Historically this species was commonly found in freshwater creeks and rivers throughout Orange County where adults would spawn and young would develop before migrating downstream to the ocean. Steelhead have been extirpated from much of their local range due to stream channelization and damming of waterways. Steelhead have been detected from Trabuco Creek immediately downstream of the project site at the confluence with Oso Creek; however, fish passage is obstructed by the Metrolink and I-5 bridges at the southern and northeast borders of the project site, respectively. An independent project to build a fish ladder to allow fish to move between the Pacific Ocean upstream along Trabuco Creek is currently in the design phase. Construction of this project site would allow for movement of steelhead through the project site, along with Pacific lamprey (*Lampetra tridentata*) in the portion of Trabuco Creek within the project site.

The **western spadefoot** is a federally proposed Threatened species and a California Species of Special Concern. It is a small toad that occurs in coastal sage scrub, grasslands, and hardwood woodlands. While it is largely terrestrial, western spadefoot requires temporary pools for breeding. It spends the dry season aestivating underground. This species has been reported from several locations in the vicinity including Caspers Regional Park (Bell Canyon), Horno Creek, Cristianitos Creek, San Juan Creek, Prima Deshecha Landfill, and Riley Wilderness Park. Suitable foraging habitat, but no suitable breeding habitat is present on the project site.

The **southwestern pond turtle** is a federally proposed Threatened species and a California Species of Special Concern. It is a small turtle native to the southwestern United States. It occurs along perennial and intermittent freshwater streams with basking sites such as mud banks, logs, and rocks. It has declined due to channelization and development of waterways, and competition from introduced species. This species has been reported from several nearby locations including Trabuco Creek, Oso Creek, Aliso Canyon, Cristianitos Canyon, Salt Creek, Sulphur Creek (Niguel Lake), and San Mateo Creek. Suitable habitat is present on the project site. This species has been observed along Trabuco Creek during focused surveys.

The **coastal California gnatcatcher** is a federally Threatened species and a California Species of Special Concern. This species occurs in coastal sage scrub habitat in low-lying foothills and valleys up to about 2,500 feet in elevation in cismontane southwestern California and Baja California. This species has been reported from several locations near the project site including locations in Mission Viejo (along Trabuco Creek), Rancho Mission Viejo, San Juan Capistrano, Dana Point, Salt Creek, Prima Deshecha, Riley Wilderness Park, and Caspers Regional Park. Suitable habitat is present on the project site. One individual was heard calling repeatedly in the coastal sage scrub on the eastern terrace between Trabuco Creek and Camino Capistrano. The portion of the project site where it was observed is within the federally-designated critical habitat for this species.

The **burrowing owl** is a Candidate for state listing as Endangered. It is a small owl historically found in grasslands, desert, and scrub habitats throughout California, including much of Orange County. Loss of open space to intensive agriculture and urbanization, coupled with prey loss, have led to declines throughout much of its range. This species has been reported from Prima Deshecha Landfill, San Onofre State Beach, and Camp Pendleton. The project site's ruderal upland areas provide suitable foraging, nesting, and wintering habitat for this species. Focused surveys for this species are in progress; no burrowing owl have been observed to date, but focused surveys are not yet complete.

The **southwestern willow flycatcher** and **least Bell's vireo** are both federally and state Endangered species. These small songbirds were historically found in riparian habitat throughout Southern and Central California. Various factors, including habitat destruction, drought, cowbird parasitism, and potentially loss of wintering and migratory stopover habitat led to population declines in both species. The last known breeding site for the flycatcher in Orange County was in Cañada Gobernadora, within five miles of the project site; however, this population was last recorded in 2009. Least Bell's vireo has been reported from many locations near the project site including along Trabuco Creek, Oso Creek, San Juan Creek, Prima Deshecha Landfill, Rancho Mission Viejo, Aliso Creek, and Cristianitos Creek. Suitable riparian habitat is present along Trabuco Creek for both of these species. Focused surveys for these species are in progress; no southwestern willow flycatchers or least Bell's vireos have been observed to date, but focused surveys are not yet complete.

The Southern California/Central Coast Evolutionarily Significant Unit (ESU) of **mountain lion** was recently listed as a state Threatened species. It is a large, long-tailed cat native to much of western North America. The ESU consists of six populations located in the Santa Ana Mountains, Eastern Peninsular Range, San Gabriel / San Bernardino Mountains, Santa Monica Mountains (Central Coast South), Central Coast Central, and Central Coast North (Santa Cruz Mountains). Mountain lions require territories of up to several hundred square miles and have declined due to habitat

fragmentation. This species is known from both the Santa Ana Mountains and the San Joaquin Hills, and individuals may use the project site as a corridor between these two regions. This species is known to occur along Trabuco Creek (upstream of the project site), along San Juan Creek in Rancho Mission Viejo, at Prima Deshecha Landfill, Riley Wilderness Park, and Caspers Regional Park. The mountain lion may use Trabuco Creek and Oso Creek for wildlife movement.

4.3.2.5 Sensitive Natural Communities and Critical Habitat

The search of the California Natural Diversity Database (CNDDB) completed as part of the BRA (**Appendix E**) identified occurrences of eight special-status natural communities within the five-quadrangle search area. Of these, two occur on the project site along Trabuco Creek: southern coast live oak riparian forest and southern mixed riparian forest.

In addition, as discussed above in Section 4.3.2.1, Vegetation, six natural communities considered sensitive by CDFW were mapped on the project site, including two upland communities and four riparian communities (inclusive of the two reported by the CNDDB). Each of these sensitive natural communities are discussed below.

- **Encelia scrub** is located adjacent to the Dr. Joe Cortese Dog Park and appears to have been planted in approximately 2014 based on a review of historic aerial imagery available on Google Earth. Although it is not naturally occurring, Encelia scrub is a coastal sage scrub community that provides habitat for native wildlife species, including the California gnatcatcher. Encelia scrub is one of several coastal sage scrub communities on the project site and is protected by the NCCP/HCP.

- **Mexican elderberry scrub** is present in a few patches around the edges of the ruderal field areas. This sensitive natural community is provisional until it is determined whether the limited number of occurrences is due to its limited distribution or a lack of data. Mexican elderberry scrub occurs in small patches on the project site but provides habitat for wildlife species.

- Four sensitive natural communities occur along Trabuco Creek and its associated tributaries: **willow riparian scrub**, **sycamore riparian woodland**, **coast live oak riparian forest** (i.e., southern coast live oak riparian forest), and **arroyo willow riparian forest/black willow riparian forest** (i.e., southern mixed riparian forest). Riparian areas are naturally limited in distribution within Southern California and provide high-quality habitat for wildlife. Riparian habitat, including these and other riparian vegetation types, is within the jurisdiction of the resource agencies as discussed below.

4.3.2.6 Jurisdictional Aquatic Resources

As provided above, Trabuco Creek is located along the eastern and southern sides of the project site. This perennial waterway originates in the Santa Ana Mountains and flows generally southwest. Trabuco Creek enters the project site through a box culvert that flows under Camino Capistrano. The upper portion of the creek within the project site is concrete-lined. After approximately 500 feet, the creek becomes an unlined, natural streambed that is densely vegetated by western sycamore, arroyo and black willow, and coast live oak. The banks of the stream are vegetated by a mix of riparian woodland and coastal sage scrub. Trabuco Creek flows over grouted riprap under the railroad bridge at the southwestern project boundary. Portions of Trabuco Creek within the project site meet the

three-parameter criteria (i.e., hydrology, hydric soils, and hydrophytic vegetation) to be considered wetlands. The extent of each agency's jurisdiction along Trabuco Creek is shown below in **Table 4.3.B: Jurisdictional Resources on the Project Site**.

Table 4.3.B: Jurisdictional Resources on the Project Site

Feature	USACE		RWQCB		CDFW	
	Non-Wetland WOTUS (acres)	Wetland WOTUS (acres)	Non-Wetland WOTS (acres)	Wetland WOTS (acres)	CDFW Streambed/Riparian (acres)	Linear Feet
Trabuco Creek	0.430	2.549	0.430	2.549	11.022	3,100
Tributary 1	0.000	0.121	0.000	0.121	0.514	374
Tributary 2	0.000	0.000	0.013	0.000	0.015	106
Total	***0.430***	***2.670***	***0.443***	***2.670***	***11.551***	***3,580***

Source: LSA (2026).
CDFW = California Department of Fish and Wildlife
RWQCB = Regional Water Quality Control Board
USACE = United States Army Corps of Engineers
WOTS = waters of the State
WOTUS = waters of the United States

Additionally, as shown in **Table 4.3.B**, two small, unnamed tributaries enter the project site from culverts underneath Camino Capistrano on the east side of the project site and flow into Trabuco Creek. The northern tributary (Tributary 1) is unlined and vegetation composition is similar to Trabuco Creek, though with a greater density of nonnative, ornamental trees. The southern tributary (Tributary 2) is concrete-lined. Portions of Tributary 1 within the project site meet the three-parameter criteria (i.e., hydrology, hydric soils, and hydrophytic vegetation) to be considered wetlands. However, there are no wetlands along Tributary 2 since it is concrete-lined. The extent of each agency's jurisdiction along Tributary 1 and Tributary 2 are shown below in **Table 4.3.B**.

Further details can be found in Appendix D, Jurisdictional Delineation, or the BRA (**Appendix E** to this Draft EIR).

4.3.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to biological resources that are relevant to the proposed project.

4.3.3.1 Federal Policies and Regulations

Federal Endangered Species Act. The federal Endangered Species Act (FESA) and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. The FESA defines species as threatened or endangered and provides regulatory protection for listed species. The FESA provides a program for the conservation and recovery of threatened and endangered species as well as the protection of designated critical habitat that U.S. Fish and Wildlife Service (USFWS) determines is required for the survival and recovery of listed species. The USFWS and National Marine Fisheries Service (NMFS) share responsibilities for administering the FESA.

The USFWS, pursuant to the FESA, protects endangered and threatened species. FESA defines an endangered species as a species in danger of extinction throughout all or a significant part of its

range and a threatened species as one that is likely to become endangered in the foreseeable future. USFWS also identifies species proposed for listing as endangered or threatened (candidate species). Other than for federal actions, there is no formal protection for candidate species under FESA. However, consultation with USFWS regarding species proposed for listing can prevent project delays that could occur if a species is listed prior to project completion.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA), first enacted in 1918, is the result of a series of treaties that the United States has with Canada, Mexico, Japan, and Russia that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird" (United States Code Title 16 [USC], Section 703). The MBTA currently includes several hundred species and includes all birds native to the United States.

The MBTA traditionally prohibited both intentional and incidental take (i.e., unintentional harm during otherwise lawful activities) of migratory birds. In 2017, Solicitor's Opinion M-37050 was issued, reinterpreting "take" to apply only to intentional acts (e.g., hunting, poaching) and specifically excluding incidental take (e.g., oil spills, wind turbines, and construction) from enforcement. This interpretation was codified into law as the "2020 Final Rule". However, the following administration issued Solicitor's Opinion M-37065, which revoked the 2020 Final Rule and restored the traditional interpretation of the MBTA prohibiting incidental take. The subsequent administration recently issued Solicitor's Opinion M-37085 reinstating Solicitor's Opinion M-37050 that take applies only to intentional acts and excludes incidental take.

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act of 1940 protects bald eagles (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) by prohibiting the taking, possession, and commerce of these species and established civil penalties for violation of this act. Take of bald and golden eagles includes to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." To disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially inferring with normal breeding, feeding, or sheltering behavior. (Federal Register [FR], volume 72, page 31132; 50 CFR 22.3).

United States Army Corps of Engineers. USACE regulates discharges of dredged or fill material into waters of the United States, which are defined as wetlands and nonwetland waters that meet specific criteria. The USACE regulatory jurisdiction, pursuant to Section 404 of the federal CWA, is founded on a connection, or nexus, between a water body and interstate commerce that may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or indirect (through a connection identified in the USACE regulations).

Rivers and Harbors Act. Under Section 10 of the River and Harbors Act, the USACE regulates the construction of any structure in or over any navigable water of the United States. Navigable waters are defined as "those waters of the U.S. that are subject to the ebb and flow of the tide shoreward

to the mean high water mark, and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce."

Clean Water Act. The Federal Clean Water Act provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 404 establishes a permit program administered by the USACE that regulates the discharge of the dredged or fill material into waters of the United States, including wetlands. The USACE implementing regulations are found in CFR, Title 33, Sections 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the United States Environmental Protection Agency (USEPA) in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Section 401 requires that a project applicant that is pursuing a federal license or permit allowing a discharge to waters of the United States to obtain State Certification of Water Quality, thereby ensuring that the discharge will comply with the provisions of the Clean Water Act. The State Water Resources Control Board (SWRCB) administers the certification program in California, primarily through its regional boards. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States.

4.3.3.2 State Policies and Regulations

California Environmental Quality Act. The California Environmental Quality Act (CEQA) applies to all discretionary projects proposed to be conducted or approved by a State, county, or city agency, as well as private projects requiring discretionary government approval. The purpose of CEQA is to disclose to the public the significant environmental effects of a proposed discretionary project; avoid or minimize damage to the environment through development of project alternatives, mitigation measures, and mitigation monitoring; disclose to the public the agency decision making process to approve discretionary projects; enhance public participation in the environmental review process; and improve interagency coordination.

State CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or State list of protected species nonetheless may be considered rare or endangered for purposes of CEQA if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals.

California Endangered Species Act. The California Endangered Species Act (CESA) establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that would result in take of a species listed under the CESA, a project proponent would need to obtain a take permit under Section 2081(b). Alternatively, the CDFW has the option of issuing a Consistency Determination (Section 2080.1) for projects that would affect a species listed under both the CESA and the FESA, as long as

compliance with the FESA would satisfy the "fully mitigate" standard of CESA, and other applicable conditions.

Porter-Cologne Water Quality Control Act. "Waters of the state" are broadly defined by the Porter-Cologne Water Quality Control Act (Section 1305(e)) as "any surface water or groundwater, including saline waters, within the boundaries of the state." All waters of the United States, including those that meet the current and any historic definition, are also considered waters of the State (CCR 23 3831 (w)). However, the State's definition of a wetland deviates from the USACE procedures in that a lack of vegetation does not disqualify a feature from identification as a wetland waters of the state, otherwise referred to as non-federal waters of the State. Additionally, isolated wetlands that may not be subject to regulations under federal law are also considered waters of the State.

The State is further required to comply with Executive Order W-59-93 published August 23, 1993, which states that the "Water Boards' regulation of dredge and fill activities must ensure 'no net loss' and long-term net gain in the quantity, quality, and permanence of wetlands acreages and values…"

California Fish and Game Code. The CDFW regulates all activities (e.g., construction, discharge, dredge, diversion) within rivers, streams, and lakes, and associated riparian vegetation, under California Fish and Game Code Sections 1600 through 1616. This includes all such features on public and private lands throughout California. The regulatory limits of their jurisdiction are generally considered to include all areas within the bed, bank, and channel of a river, stream, or lake, plus the outer extent of riparian vegetation immediately adjacent to these aquatic features. This also includes man-made and/or channelized streams located where natural streams historically occurred, or that are connected to natural streams. Isolated wetlands that are not located within the jurisdictional limits described above are not regulated by the CDFW.

Sections 3503, 3503.5, and 3513 make it unlawful to take, possess, or destroy any bird's nest or any bird's eggs. Section 3503.5 specifically protects any birds in the orders *Falconiformes* or *Strigiformes* (i.e., birds of prey, such as hawks, eagles, and owls) and their nests and eggs. Section 3513 of the California Fish and Game Code prohibits the take and possession of any migratory nongame bird, as designated in the MBTA prior to January 1, 2025. California recently passed legislation explicitly stating that California Fish and Game Code continues to regulate incidental take, filling gaps created by fluctuating federal interpretations.

Sections 3511, 4700, 5050, and 5515 prohibit take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species, except as allowed for in an approved Natural Communities Conservation Plan, or through direct legislative action. In July 2023, Senate Bill (SB) 147 was signed into law granting the CDFW the ability to issue a permit under CESA for the take of fully protected species for specific infrastructure projects including those related to the State Water Project, critical regional or local water agency infrastructure, transportation projects that do not increase highway or street capacity, and wind and solar projects within the state that provide electricity to a California-based balancing authority. Take permits may be issued under this law until December 31, 2033.

Native Plant Protection Act, Sections 1900 through 1913 of the California Fish and Game Code. California's Native Plant Protection Act (NPPA) requires all State agencies to use their authority to

carry out programs to conserve endangered and rare native plants. Provision of the NPPA prohibit the taking of listed plants from the wild and requires notification of CDFW at least ten days in advance of any change in land use. This allows CDFW to salvage listed plant species that otherwise would be destroyed. A project proponent is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

4.3.3.3 Regional Policies and Regulations

Central-Coastal Natural Communities Conservation Plan/Habitat Conservation Plan. The Orange County Central-Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) serves as a comprehensive, multijurisdictional habitat-based conservation program. It focuses on the conservation of multiple species and their associated habitats while allowing for economic uses that meet social and economic needs in central and coastal areas of the County. The NCCP/HCP was approved on April 16, 1996, and the Implementation Agreement was executed on July 17, 1996.

The Central/Coastal NCCP/HCP focuses on the conservation of coastal sage scrub and was designed around the needs of three target species: coastal California gnatcatcher (*Polioptila californica californica*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), and orange-throated whiptail (*Aspidoscelis hyperythra*). In the conservation of large areas of coastal sage scrub into Reserve areas for these three target species, habitat was also conserved for several other species, which were also provided coverage under the NCCP/HCP (i.e., "Covered Species"). A limited number of species were also determined to be "Conditionally Covered." The NCCP/HCP may be used to grant take of Conditionally Covered species through a streamlined consultation with the resource agencies, assuming the take would not jeopardize the continued existence of the species or elevation of the species' status, and that the impacts are minimized and mitigated to the greatest degree practicable.

The NCCP/HCP "Participating Landowners" contributed significant lands and/or funding to the Reserve System and adaptive management program. Participating Landowners include the County, Southern California Edison, Metropolitan Water District, Irvine Ranch Water District, Serrano Water District, Transportation Corridor Agencies, M.H. Sherman Company/Chandis Securities Company/Sherman Foundation, The Irvine Company, UC Irvine, California Department of Parks and Recreation, and CDFW. The NCCP/HCP allows Participating Landowners "take" of Covered Species for otherwise lawful actions (e.g., public and private development) in exchange for the assembly and ongoing adaptive management of the NCCP/HCP Reserve System. Participating Landowners are responsible for implementing the NCCP/HCP as described in the Implementation Agreement.

Jurisdictions and entities that own land within the overall NCCP/HCP Plan Area but that are not Participating Landowners are considered "Non-Participating Landowners". Non-Participating Landowners may elect to use the NCCP/HCP as mitigation for impacts to Covered Species. Non-participating landowners may satisfy the requirements of FESA and CESA by: (1) avoiding impacts on coastal sage scrub; (2) satisfying applicable FESA and CESA provisions as determined through consultation with the resource agencies; or (3) payment of a mitigation fee to the non-profit reserve management corporation as provided for in the NCCP/HCP and Implementation Agreement. The

applicant has elected to pursue the latter option for mitigation for impacts to covered species that may be affected by the project, as explained below.

4.3.3.4 Local Policies and Regulations

City of San Juan Capistrano General Plan. The Conservation and Open Space and Community Design Elements of the City's General Plan contain the following goals and implementing policies related to biological resources that would be applicable to the proposed project:

- **Conservation and Open Space Goal 2:** Protect and preserve important ecological and biological resources.
    - **Policy 2.1:** Use proper land use planning to reduce the impact of urban development on important ecological and biological resources.
    - **Policy 2.2:** Preserve important ecological and biological resources as open space.
    - **Policy 2.3:** Develop open space uses in an ecologically sensitive manner.
- **Conservation and Open Space Goal 4:** Prevent incompatible development in areas which should be preserved for scenic, historic, conservation, or public safety purposes.
    - **Policy 4.1:** Assure incompatible development is avoided in those areas which are designated to be preserved for scenic, historic, conservation, or public safety purposes.
- **Conservation and Open Space Goal 5:** Shape and guide development in order to achieve efficient growth and maintain community scale and identity.
    - **Policy 5.2:** Ensure that new development integrates and preserves areas designated for scenic, historic, conservation, or public safety reasons.
- **Community Design Goal 1:** Encourage and preserve a sense of place.
    - **Policy 1.1:** Preserve significant amounts of land and important natural features for open space.
- **Community Design Goal 3:** Preserve and enhance natural features.
    - **Policy 3.1:** Limit development of important natural characteristics such as ridgelines, unique hillside features and creeks.

City of San Juan Capistrano Municipal Code. Building and construction in the city are subject to the regulations of the City's Municipal Code. The following provisions of the City's Municipal Code are related to biological resources:

- **Article 3, Development Review Procedures, Section 9-2.349, Tree Removal Permit.** Section 9-2.349 of the City's Municipal Code establishes procedures for tree removal in order to ensure

that suitable trees are maintained throughout the City, heritage trees are preserved, and the use of native, drought resistant and California-friendly trees on public land private property is encouraged. In addition, Section 9-2.349 requires new tree planting where appropriate on public and private property

- **Article 5, Supplemental District Regulations, Section 9-3.557, Tree Preservation:** Section 9-3.557 of the City's Municipal Code provides for the preservation and maintenance of existing trees within the City.

4.3.4 Methodology

To assess the potential impacts of the proposed project on biological resources, a Biological Resources Assessment (BRA) was prepared by LSA in February 2026 (see **Appendix E**). The BRA included a literature review and records search, results of a general biological survey of the project site, and a formal jurisdictional delineation. Focused surveys for several species are currently in progress (spring/summer 2026). These items are discussed further below.

4.3.4.1 Literature Review

Prior to the field surveys, LSA biologists conducted a literature review and records search to identify reported occurrences of sensitive or special-status[2] plants, wildlife, and habitats in the vicinity of the project site. In addition, LSA biologists reviewed federal and State lists of sensitive species to add other species with potential to occur in the project vicinity. The literature review included the following:

- **California Natural Diversity Data Base information (CNDDB – RareFind 5)**, which is administered by the CDFW. This database includes records of sensitive plant and wildlife species as well as sensitive natural communities that occur in California. The literature review included a review of records from four USGS quadrangles surrounding the project site (*Dana Point*, *San Juan Capistrano*, *San Clemente*, *Canada Gobernadora, and Laguna Beach*).

- **California Native Plant Society's (CNPS) Rare Plant Inventory** is administered by CNPS in cooperation with CDFW. This database includes records of sensitive plant species ranked into categories, or California Rare Plant Ranks (CRPR)[3] based on their conservation status and threat

[2] For the purposed of this report, the term "special-status species" refers to those species that are listed or proposed for listing under the CESA and/or FESA, California Fully Protected Species, California Species of Special Concern, California Watch List species, and species Covered and Conditionally Covered under the County of Orange Central-Coastal NCCP/HCP. It should be noted that "Species of Special Concern" is an administrative designation made by the CDFW and carries no formal legal protection status. However, Section 15380 of the CEQA Guidelines indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

[3] At the discretion of the CEQA Lead Agency, impacts to these species may be analyzed pursuant to the CEQA Guidelines Sections 15125(c) and 15380. CRPR 1B and 2B species are considered to meet the definition of rare, threatened, or endangered, and thus meet the criteria in Section 15380. Plants in CRPR 3 (limited information; review list), CRPR 4 (limited distribution; watch list), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts.

to remaining known populations. The literature review included a review of records from five USGS quadrangles surrounding the project site (*Dana Point*, *San Juan Capistrano*, *San Clemente*, *Canada Gobernadora, and Laguna Beach*).

- **United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System**, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists critical habitats, national wildlife refuges, results of the National Wetlands Inventory (NWI), and a partial list of migratory birds that could occur near the project site. An IPaC Report was generated for the project site.

In addition to the databases listed above, the literature review included (1) CDFW's *Special Animals List, Special Vascular Plants, Lichens, and Bryophytes List,* and their *List of Sensitive Natural Communities*; (2) historic and current aerial imagery of the project site; (3) applicable sections of the Central-Coastal NCCP/HCP; (4) local land use policies related to biological resources.

4.3.4.2 General Biological Field Survey

A general biological survey of the project site was conducted by LSA Senior Biologist Amber Heredia and Biologists Samuel Bressler and Andy Maldonado on July 16, 2025, from 7:00 a.m. to 12:00 p.m. The field survey took place on a partly cloudy morning with weather conditions conducive to the detection of plant and wildlife species (i.e., 100% cloud cover, winds of 0–2 miles per hour, and temperature ranging from 62 to 73 degrees Fahrenheit). The entire project site was surveyed on foot. LSA Biologists made notes on general site conditions, vegetation composition, plants and wildlife observed, and suitability of habitat for various special-status species. Representative photographs were taken to document existing biological conditions at the time of the survey and are included as Appendix B to the BRA (**Appendix E** to this Draft EIR). Plant and wildlife species observed during the field survey were recorded in field notes and are included in Appendix C of the BRA (**Appendix E** to this Draft EIR). The Biologists also recorded the location of any special-status species incidentally observed on the field map

Vegetation was mapped on a 1-inch equals 160 feet (1"=160') scale aerial photograph provided by Nearmap (flown May 2025) and/or on Environmental Systems Research Institute (ESRI) Field Maps mobile application showing the project site. Vegetation/natural communities and land cover types existing within the project site were mapped and classified based on existing conditions at the time of the surveys using the habitat classes described in the *Methods Used to Survey the Vegetation of Orange County Parks and Open Space Areas and the Irvine Company Property*, developed for the County of Orange Environmental Management Agency and Environmental Planning Division, which was used for the NCCP/HCP and is the standard nomenclature for Orange County. These vegetation types were cross-walked to the more recent *A Manual of California Vegetation*, which is used by CDFW as the nomenclature for their *List of Sensitive Natural Communities*.

4.3.4.3 Jurisdictional Delineation

LSA Senior Biologist Heather Madera and Biologist Samuel Bressler conducted the fieldwork for the jurisdictional delineation on October 27, 2025. All features within the project site were evaluated according to the most current federal and/or State regulatory criteria and guidance. General

conditions and characteristics associated with each drainage feature were noted on datasheets and photographed.

The project site was surveyed on foot and areas of potential jurisdiction observed within the project site were mapped on a recent, high-resolution aerial photograph (scale 1 inch = approximately 200 feet) and/or on ESRI Field Maps mobile application showing the project site. The widths of the features mapped during the field investigation were determined by measurements taken in the field in accordance with guidelines set forth by the National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams. Wetland delineation procedures described in the Regional Supplement and those recently enacted by the SWRCB were implemented for areas that exhibited characteristics potentially indicative of wetlands. The jurisdictional delineation is included in Appendix D of the BRA (**Appendix E** to this Draft EIR).

4.3.4.4 Focused Surveys

Focused surveys for special-status plants, Crotch's bumble bee, southwestern pond turtle, burrowing owl, southwestern willow flycatcher, and least Bell's vireo are in progress in spring/summer 2026. Protocol surveys are being conducted consistent with standardized survey protocols and guidelines from the USFWS, CDFW, CNPS and/or USGS (depending on species). Results of these surveys to date are included in this report; however, for most species, findings cannot be made until all surveys are completed.

4.3.5 Thresholds of Significance

The thresholds for impact on biological resources used in this analysis are consistent with Appendix G of the State Guidelines for the Implementation of CEQA of 1970 (*State CEQA Guidelines*). The proposed project may be deemed to have a significant impact with respect to biological resources if it would:

Threshold 4.3.1: 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 CDFW or USFWS;

Threshold 4.3.2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;

Threshold 4.3.3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means;

Threshold 4.3.4: Create substantial interference 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;

Threshold 4.3.5: Conflict with the provisions of an approved local, regional or State policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance; or

Threshold 4.3.6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.3.6 Project Impacts

Threshold 4.3.1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Less Than Significant With Mitigation Incorporated

Discussion of Effects: As discussed above, the majority of the project site is developed or disturbed with existing or past uses (e.g., Swanner House, Putuidem Village, Dr. Joe Cortese Dog Park, parking lot, agriculture, and farm structures). Much of the central and southern portion of the project site (north of Trabuco Creek) appear to be routinely cleared of vegetation and currently consists of ruderal (weedy) species with scattered native and nonnative trees. The majority of native vegetation types are present along Trabuco Creek and the associated Trabuco Creek Trail. Coastal sage scrub and coast live oak woodland vegetation types are present in upland areas along both sides of the Trabuco Creek Trail and on the upper banks of Trabuco Creek, while riparian vegetation types are located along Trabuco Creek. Vegetation types mapped on the project site are described below. The acreages of each vegetation and land cover type occurring on the project site are shown in **Table 4.3.A** in Section 4.3.2.1, Vegetation, above.

The project is within the Coastal Subregion of the Orange County Central-Coastal NCCP/HCP. Accordingly, Orange County Central-Coastal NCCP/HCP regulatory coverage is provided for activities associated with the proposed project. Furthermore, any project activities that may result in the "take" of sensitive species and their habitats would be subject to FESA Section 4(d) or Section 10 permits, Section 7 consultation, a CDFW Section 1600 Streambed Alteration Agreement, and/or a Section 2081 CESA permit. The following provides a discussion of potential impacts on special-status plant and wildlife species and their habitat, based on observations during the site visits described in Section 4.3.4.2.

Special-Status Plant Species. As previously discussed, of the 68 special-status plant species that have been reported from the project region, a total of 62 species are not expected to occur based on lack of suitable habitat or because they were not observed during focused surveys. Focused surveys are in progress; species that bloom in early and late spring have already been surveyed and can be determined to be absent, while the presence or absence of species that bloom later is unknown. Potential impacts on these species with implementation of the proposed project are discussed below.

One CRPR 1B and 2B species has potential to occur on the project site, white rabbit-tobacco (*Pseudognaphalium leucocephalum*) and five CRPR 4 species are known to occur on the project site. The CRPR 1B and 2B species are considered threatened or endangered in California. If present, proposed project impacts on CRPR 1B and 2B species would be considered significant. As focused surveys have not yet been conducted, the presence or absence of this species (white rabbit-tobacco) is currently unknown. Accordingly, impacts to CRPR 1B and 2B species would be considered **potentially significant** and mitigation would be required. As discussed above, the proposed project would be required to implement **Mitigation Measure BIO-1,** which would reduce potential impacts on CRPR 1B and 2B species to less than significant.

Although the CRPR 3 and 4 species are not yet considered threatened or endangered in the project region, these species are on a "watch list", and the locations of these species are being tracked by CNPS and CDFW. Two of the CRPR 4 species, San Diego sagewort and paniculate tarplant, were observed along the banks of Trabuco Creek. The paniculate tarplant population was identified adjacent to but outside of the footprint of the proposed Community Building and the San Diego sagewort was found along Trabuco Creek. Neither special-status plant species would be impacted by the project. Three additional CRPR 4 species have been observed during focused surveys, southwestern spiny rush, Coulter's matilija poppy, and San Diego viguiera; these locations are not considered naturally occurring. The locations of these species are outside of the proposed project impact area; therefore, impacts would be less than significant and no mitigation would be required.

Mitigation Measure BIO-1

Special-Status Plant Species. Prior to the initiation of vegetation clearing or other construction activities, a focused survey shall be conducted at the appropriate peak flowering season of the target special-status plant species. If special-status species are observed within the project site, the impact shall be evaluated based on the size and status of the species observed. If no special-status plant species are observed, then no further mitigation shall be required.

California Rare Plant Ranks (CRPR) 1B and 2B Species. If any CRPR 1B or 2B species are present, impacts would be considered potentially significant and mitigation would be required to address potential impacts and reduce them to less than significant. If no individuals of the species would be impacted, then no further mitigation would be required.

The project Applicant shall consider whether the design could be revised to avoid or minimize impacts on the species location(s). If the species cannot be avoided, then the project Applicant shall coordinate with Development Services Director of the City of San Juan Capistrano (City), or their designee, to determine the mitigation strategy. The mitigation strategy may include: (1) on-site preservation or enhancement; (2) purchase of credits from an approved mitigation bank; (3) translocation of this species to an off-site mitigation site. If translocation is selected, the project Applicant shall prepare a Rare Plant Mitigation Plan for review and approval by

the USFWS and CDFW. The Rare Plant Mitigation Plan shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to number of individuals
- Mitigation site selection with appropriate microclimate
- Methodology for collecting seed and translocating corms (including storage)
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

Overall, with implementation of **Mitigation Measure BIO-1**, potential impacts on special-status plant species, including CRPR 1B and 2B, would be **less than significant with mitigation incorporated.**

Special-Status Wildlife Species. As previously discussed, of the 50 special-status wildlife species that have been reported from the project region, a total of 33 special-status wildlife species have potential to occur on the project site. Potential impacts on these species with implementation of the proposed project are discussed below.

Invertebrates. The following provides a discussion of potential impacts on special-status invertebrate species.

- **Crotch's bumble bee** (*Bombus crotchii*) was observed during focused surveys (in progress in spring/summer 2026) of the project site. Implementation of the proposed project would impact 3.28 acres of suitable habitat (scrub, woodland, and ornamental) for this species. Therefore, implementation of the proposed project would have a **significant** impact on Crotch's bumble bee through the removal of suitable habitat. Therefore, the proposed project would be required to implement **Mitigation Measures BIO-2** and **BIO-3**, which require a focused survey for Crotch's bumble bee be conducted prior to the initiation of vegetation removal or other construction activities and biological monitoring for Crotch's bumble bee during vegetation removal.

Mitigation Measure BIO-2 **Crotch's Bumble Bee.** Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist with expertise in surveying for native bumble bees. The qualified biologist shall conduct a focused survey for Crotch's bumble bee in accordance with the most recent CDFW guidelines (CDFW 2023). The focused survey shall consist of three site visits during the colony active period (April through August). This focused survey is in progress in spring/summer 2026.

If Crotch's bumble bee is observed, the project Applicant shall obtain an Incidental Take Permit from CDFW prior to

removal of habitat for this species. The project Applicant shall consult with CDFW to determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate microclimate
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

If no Crotch's bumble bees are observed, the project Applicant will not need to obtain an Incidental Take Permit, and no compensatory mitigation will be required.

Mitigation Measure BIO-3

Crotch's Bumble Bee Biological Monitoring. Regardless of the results of the focused survey conducted for **Mitigation Measure BIO-2**, CDFW survey guidelines require biological monitoring during vegetation removal. A qualified biological monitor shall be present during the clearing of vegetation when Crotch's bumble bees are active (i.e., February 1 through October 31). The biological monitor shall confirm that the project limits are clearly marked and that vegetation removal and construction staging occur only within the project limits. No biological monitoring would be needed from November 1 through January 31.

If Crotch's bumble bee is observed during the biological monitoring, the project Applicant shall contact CDFW, and an Incidental Take Permit shall be obtained as described above under **Mitigation Measure BIO-2.**

With implementation of **Mitigation Measures BIO-2** and **BIO-3**, potential impacts on Crotch's bumble bee would be reduced to less than significant.

- **Monarch butterfly** (*Danaus plexippus plexippus* pop. 1) may overwinter on the project site. If removal of mature trees would occur during the overwinter season (October-March), construction of the proposed project could impact this species, if overwintering populations are present on the project site. Any impact on an overwintering roost for this species would be considered a **potentially significant** impact. Therefore, the proposed project would be required to implement **Mitigation Measure BIO-4,** which requires a survey of trees to be removed to determine the presence of overwintering monarch butterflies. If overwintering monarchs are observed within the project site, **Mitigation Measure BIO-4** requires the protection of the host tree(s) for the duration of the overwintering season.

  Mitigation Measure BIO-4 **Overwintering Monarch Butterflies.** Prior to the removal of any mature trees during the monarch overwintering season (October 1-March 31), the project Applicant shall retain a qualified biologist to survey the tree(s) to be removed, as well as any trees located within 100 feet, for presence of overwintering monarch butterflies. The survey shall be conducted during the overwintering season, during appropriate conditions. Surveys must be conducted before 10:00 a.m., at a temperature not to exceed 55 degrees Fahrenheit, with no rain or strong winds.

  If overwintering monarchs are observed within the project site, the host tree(s) shall be protected for the duration of the overwintering season. To prevent any impacts to the microclimate of the roost, a protective buffer of at least 100 feet shall be implemented, within which mature trees shall not be removed during the overwintering season.

  With implementation of **Mitigation Measure BIO-4**, potential impacts on overwintering monarch butterfly would be reduced to less than significant.

Fish. Trabuco Creek provides suitable habitat for arroyo chub (*Gila Orcutt*). In addition, construction of the CalTrout Trabuco Creek Fish Ladder Project would remove barriers at the upper and lower ends of the project site, which would allow Southern California steelhead (*Oncorhynchus mykiss*) and potentially Pacific lamprey (*Entosphenus tridentatus*) to travel upstream. Although the project has been designed to avoid impacts on Trabuco Creek, with only minor impacts occurring on the upper banks along the edge of Tributary 1 and for placement of footings for the bridge over Trabuco Creek, proposed project activities have the potential to affect water quality along the creek, including runoff from agricultural and equestrian uses, resulting in a **potentially significant** impact. Implementation of **Mitigation Measure BIO-5,** which requires the installation of temporary silt fencing during construction to prevent any sediment-laden runoff or debris from entering on-site waterways, would reduce this impact to

less than significant. Further, as discussed in Section 4.9, Hydrology and Water Quality, the proposed project would be required to adhere to **Regulatory Compliance Measures HYD-1, HYD-2,** and **HYD-3** and implement **Mitigation Measure HYD-1**. **Regulatory Compliance Measure HYD-1** requires the proposed project obtain coverage under the Construction General Permit, including preparation of a SWPPP and implementation of Construction Best Management Practices (BMPs) to address pollutants of concern in stormwater runoff during construction; **Regulatory Compliance Measure HYD-2** requires compliance with the requirements of Sections 8-2.15, 8-2.16, and 8-14.107 of the San Juan Capistrano Municipal Code, including preparation and implementation of a pollution control plan, construction BMP plan, and/or erosion and sediment control plan; and **Regulatory Compliance Measure HYD-3** requires compliance with the Regional MS4 Permit, including preparation and implementation of a Final Water Quality Management Plan (WQMP) that would specify the Site Design, Source Control, and Low Impact Development (LID) BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff. **Mitigation Measure HYD-1** details the equestrian-related water quality BMPs that the proposed project would be required to implement during operation in order to address pollutants from equestrian activities. As discussed in Section 4.9, Hydrology and Water Quality, implementation of these measures would reduce potential water quality impacts on Trabuco Creek to less than significant and would therefore reduce potential impacts on special-status fish species that may be present within the project site.

Mitigation Measure BIO-5 **Water Quality.** Grading and construction resulting in ground disturbance should occur within the typical dry season (April 15 through October 15), as feasible, to avoid erosion and sedimentation impacts to nearby creeks and water quality. The Director of the City of San Juan Capistrano Development Services Department, or designee, shall verify that project plans require the Construction Contractor to install adequate erosion and sedimentation barriers (e.g., silt fencing) prior to ground disturbance to prevent any sediment-laden runoff or debris from entering on-site waterways during the wet season or periods of rain.

This silt fencing will also serve as a temporary barrier to wildlife entering work areas during construction. The barriers shall consist of 3-foot-tall silt fencing buried to a depth of at least 6 inches below the soil surface along the outer limits of all work areas (or as otherwise required by the storm water pollution and prevention plan). These barriers shall be inspected daily by construction personnel and maintained and repaired as necessary for the duration of construction to ensure that they are functional and are not a hazard to wildlife on the outer side of the fence. All barriers shall be removed following completion of construction.

Amphibians. The following provides a discussion of potential impacts on special-status amphibian species.

- The **western spadefoot (***Spea hammondii*) has the potential to occur in scrub habitats for foraging but would not be expected to breed on the project site due to lack of suitable temporary breeding pools. Implementation of the proposed project would impact a limited amount of foraging habitat (0.28-acre scrub habitat) for this species. However, the western spadefoot could occur in the upland habitats adjacent to the creek and could be directly impacted by construction activities. Western spadefoot is a Covered species in the Coastal Subregion of the NCCP/HCP. Therefore, the proposed project would be subject to the permitting framework and avoidance, minimization, and mitigation measures, and fee program (if applicable) provided in the NCCP/HCP for this species. Compliance with the requirements of the NCCP/HCP would reduce potentially significant impacts on western spadefoot and no mitigation measure would be required.

Reptiles. The following provides a discussion of potential impacts on special-status reptile species.

- The **southwestern pond turtle** (*Actinemys pallida*) was observed along Trabuco Creek during focused surveys in 2026. Although the proposed project has been designed to avoid impacts on Trabuco Creek, with only minor impacts occurring on the upper banks along the edge of Tributary 1 and for placement of footings for the bridge over Trabuco Creek, the southwestern pond turtle could occur in the upland habitats adjacent to the creek and could be directly impacted by construction activities. Additionally, proposed project activities have the potential to affect water quality along the creek, including runoff from agricultural and equestrian uses, resulting in a **potentially significant** impact. However, as discussed above, the proposed project would be required to implement **Mitigation Measure BIO-5** and adhere to **Regulatory Compliance Measures HYD-1, HYD-2,** and **HYD-3** and implement **Mitigation Measure HYD-1**, which would reduce potential water quality impacts to less than significant. In addition, the proposed project would be required to implement **Mitigation Measure BIO-6**, which requires a focused survey for southwestern pond turtle prior to the initiation of vegetation removal or other construction activities. If southwestern pond turtle are found at the project site, **Mitigation Measure BIO-6** requires a Section 7 Conference with the USFWS and consultation with the CDFW and payment of an in-lieu mitigation fee or preparation and implementation of a Habitat Mitigation and Monitoring Plan.

Mitigation Measure BIO-6

Southwestern Pond Turtle. Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist to conduct a focused survey for southwestern pond turtle in accordance with the most recent guidelines (USGS 2006). The focused survey shall consist of multiple site visits during the active period (April through August). This focused survey is in progress in spring/summer 2026.

If southwestern pond turtle is observed, the project Applicant shall conduct a Section 7 Conference with the USFWS and shall also consult with the CDFW associated with jurisdictional permitting described under **Mitigation Measure BIO-9.** The project Applicant

shall consult with the USFWS/CDFW to determine the appropriate avoidance and minimization measures (e.g., pre-construction surveys, biological monitoring, exclusion fencing) to avoid direct mortality of this species.

The consultation shall also determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared, submitted and approved by the USFWS and CDFW prior to the start of construction. The Habitat Mitigation and Monitoring Plan shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate hydrology
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

With implementation of **Mitigation Measure BIO-6**, potential impacts on southwestern pond turtle would be reduced to less than significant.

- In addition, nine special-status reptile species have potential to occur on the project site: **coast horned lizard** (*Phrynosoma blainvillii*), **orange-throated whiptail** (*Aspidoscelis hyperthyra*), **coastal whiptail** (*Aspidoscelis tigris stejnegeri*), **Southern California legless lizard** (*Anniella stebbinsi*), **California glossy snake** (*Arizona elegans*), **two-striped garter snake** (*Thamnophis hammondii*), **south coast garter snake** (*Thamnophis sirtalis* pop. 1), and **red-diamond rattlesnake** (*Crotalus ruber*). The proposed project would impact areas of scrub, riparian, and woodland habitat that would be suitable for these species. Coast horned lizard, orange-throated whiptail, coastal whiptail, and red-diamond rattlesnake are Covered species in the Coastal Subregion of the NCCP/HCP. Therefore, the proposed project would be subject to the permitting framework and avoidance, minimization, and mitigation measures, and fee program (if applicable) provided in the NCCP/HCP for these species, and no mitigation would be required.

Southern California legless lizard and California glossy snake are not covered by the NCCP/HCP, but they benefit from the habitat conserved in the reserves under the plan. Therefore, the impact on these species would be considered adverse but less than significant because the amount of habitat loss would be limited compared to the amount remaining in the project region. Therefore, no mitigation would be required for the loss of habitat for these species.

Two-striped garter snake and south coast garter snake have the potential to occur along Trabuco Creek. As described above, the proposed project has been designed to avoid impacts on Trabuco Creek, with only minor impacts occurring on the upper banks along the edge of Tributary 1 and for placement of footings for a bridge over Trabuco Creek. Overall, the proposed project would impact 0.09 acre of habitat for these species. The impact on these species would be considered adverse but less than significant because the amount of habitat loss would be limited compared to the amount remaining in the project region. Therefore, no mitigation would be required for the loss of habitat for these species. In addition, the proposed project would be required to adhere to **Mitigation Measure BIO-5**, **Regulatory Compliance Measures HYD-1, HYD-2,** and **HYD-3** and implement **Mitigation Measure HYD-1**, which would reduce potential water quality impacts to less than significant and would further reduce potential impacts on two-striped garter snake and south coast garter snake.

Birds. The following provides a discussion of potential impacts on special-status bird species.

Coastal California gnatcatcher (*Polioptila californica californica*) was incidentally observed in coastal sage scrub east of Trabuco Creek within the project site during the July 2025 general biological survey. Implementation of the proposed project would impact 0.28 acre of coastal sage scrub habitat for this species; 3.35 acres of critical habitat for this species (includes areas that would not be suitable habitat for this species); and 3.35 acres of Existing Use areas under the NCCP/HCP (discussed further below under Threshold 4.3.6). Additionally, noise generated by construction activities and project development during operation could indirectly impact this species by deterring nesting adjacent to the project site and/or could interfere with the communication between nesting pairs of gnatcatchers, resulting in reduced nest success. Accordingly, the proposed project's impact on coastal California gnatcatcher would be **potentially significant**. Coastal California gnatcatcher is a Covered species under the NCCP/HCP. Therefore, the proposed project would be subject to the permitting framework and avoidance, minimization, and mitigation measures, and fee program (if applicable) provided in the NCCP/HCP for coastal California gnatcatcher. However, take of coastal California gnatcatcher is not covered in Existing Use areas. Therefore, the proposed project would be required to implement **Mitigation Measures BIO-7** and **BIO-8**. **Mitigation Measure BIO-7** requires consultation with the USFWS to obtain a Biological Opinion/Incidental Take Permit for the loss of coastal sage scrub habitat occupied by coastal California gnatcatcher, critical habitat, and the loss of NCCP/HCP Existing Use habitat through payment of an in-lieu mitigation fee or preparation and implementation of a Habitat Mitigation and Monitoring Plan, and **Mitigation Measure BIO-8** details the

NCCP/HCP construction-related minimization mitigation measures that would be required to be implemented during vegetation clearing.

Mitigation Measure BIO-7 **Coastal Sage Scrub/Coastal California Gnatcatcher Habitat.** Prior to issuance of a grading permit, the project Applicant shall consult with the USFWS to obtain a Biological Opinion/Incidental Take Permit for the loss of coastal sage scrub habitat occupied by coastal California gnatcatcher. The consultation shall determine the appropriate compensatory mitigation for the loss of coastal sage scrub and other habitat within the Existing Use area; impacts on Critical Habitat; and impacts on the existing conservation easement. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., one acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at an approved mitigation bank; or a combination of these approaches, as approved by USFWS. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate hydrology
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

Mitigation Measure BIO-8 **Standard Avoidance and Minimization Measures for Coastal California Gnatcatcher.** During vegetation clearing, the NCCP/HCP requires the following construction-related minimization mitigation measures:

a. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers shall occur during the breeding season (i.e., February 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures," are subject to public health and safety considerations. These considerations include

unexpected slope stabilization, erosion control measures, and emergency facility repairs. In the event of such public health and safety circumstances, the project Applicant shall provide USFWS/CDFW with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens, and any other coastal sage scrub Covered Species that are not otherwise flushed and shall carry out the following measures only to the extent as practicable in the context of the public health and safety considerations.

b. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub, a survey shall be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.

c. A monitoring biologist, acceptable to USFWS/CDFW shall be onsite during any clearing of coastal sage scrub. The project Applicant shall advise USFWS/CDFW at least 7 calendar days prior to the clearing of any habitat occupied by Covered Species to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing capture activities. The monitoring biologist shall flush Covered Species (avian or other mobile Covered Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they shall be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It shall be the responsibility of the monitoring biologist to assure that Covered Bird Species shall not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.

d. Following the completion of initial grading/earth movement activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel shall be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment shall be permitted within such marked areas.

e. In areas bordering the NCCP Reserve System containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations shall be restricted to a minimum number during construction consistent with Project construction requirements. Waste dirt or rubble shall not be deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operators shall be conducted and documented to ensure maximum practicable adherence to these measures.

f. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.

With implementation of **Mitigation Measures BIO-7** and **BIO-8**, potential impacts to coastal California gnatcatcher would be reduced to less than significant.

- **Least Bell's vireo** (*Vireo bellii pusillus)* and **southwestern willow flycatcher** (*Empidonax traillii extimus*) have the potential to occur along Trabuco Creek on the project site. Focused surveys (in progress in spring/summer 2026) would be needed to determine the presence or absence of these species along Trabuco Creek. Implementation of the proposed project would impact 0.09 acre of riparian habitat suitable for these species. Additionally, noise generated by construction activities and project development during project operation could indirectly impact this species by deterring nesting adjacent to the project site and/or could interfere with the communication between nesting pairs of vireos/flycatchers, resulting in reduced nest success. Accordingly, the proposed project's impact on Least Bell's vireo and southwestern willow flycatcher would be **potentially significant**. Although Least Bell's vireo and southwestern willow flycatcher are Conditionally Covered species under the NCCP/HCP, the proposed project would be required to implement **Mitigation Measures BIO-9** and **BIO-10**. **Mitigation Measure BIO-9** requires the project applicant obtain the appropriate permits

to impact areas within the jurisdiction for Trabuco Creek and along the edge of Tributary 1, including a Section 1602 Streambed Alteration Agreement from CDFW, and the compensation for the loss of jurisdictional resources and impacts on the existing conservation easement through payment of an in-lieu mitigation fee or preparation or implementation of a Habitat Mitigation and Monitoring Plan. **Mitigation Measure BIO-10** requires protocol focused survey for least Bell's vireo and southwestern willow flycatcher prior to commencing construction activities and consultation with the USFWS and CDFW to obtain a Biological Opinion/Incidental Take Permit and determine appropriate avoidance and minimization measures for these species.

Mitigation Measure BIO-9 **Riparian Habitat/Jurisdictional Permitting.** Prior to issuance of a grading permit, the project Applicant shall obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and along the edge of Tributary 1, a Section 1602 Streambed Alteration Agreement from CDFW. The project Applicant shall consult with CDFW to determine the appropriate compensatory mitigation for the loss of jurisdictional resources and impacts on the existing conservation easement. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of jurisdiction impacted). The mitigation strategy may include preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at an approved mitigation bank; or a combination of these approaches, as approved by the permitting agency. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate hydrology
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

Mitigation Measure BIO-10 **Focused Riparian Birds Survey.** Prior to commencing construction activities, the project Applicant shall retain a qualified biologist to conduct a protocol focused survey for least Bell's vireo and southwestern willow flycatcher. The surveys shall be conducted in accordance with the latest

USFWS survey protocol for each species. Focused surveys for least Bell's vireo shall occur between April 10 and July 31 (USFWS 2001). Focused surveys for southwestern willow flycatcher shall occur between May 15 and July 17 (USFWS 2010).

If least Bell's vireo and/or southwestern willow flycatcher are observed on or adjacent to the project site, the project Applicant shall consult with the USFWS and CDFW to obtain a Biological Opinion/Incidental Take Permit. The consultation shall also determine the appropriate compensatory mitigation for the loss of riparian habitat and appropriate avoidance and minimization measures for these species. Avoidance and minimization measures may include, but would not be limited to, restriction on removal of riparian vegetation during the breeding season (March 15 to September 15), pre-construction surveys (if work occurs within 500 feet of Trabuco Creek during the breeding season), protective buffers (if an active nest is observed), biological monitoring, and/or noise monitoring/noise abatement measures (if needed). These measures shall be incorporated into the regulatory permits described above under **Mitigation Measure BIO-9**.

If neither least Bell's vireo nor southwestern willow flycatchers are observed, the project Applicant will not need to obtain a Biological Opinion/Incidental Take Permit for these species. However, jurisdictional permitting described under **Mitigation Measure BIO-9** would still be required.

With implementation of **Mitigation Measures BIO-9** and **BIO-10**, potential impacts on Least Bell's vireo and southwestern willow flycatcher would be reduced to less than significant.

- **Burrowing owl** (*Athene cunicularia*) has the potential to occur on the project site. Focused surveys (in progress in spring/summer 2026) would be needed to determine the presence or absence of this species on the project site. Implementation of the proposed project would impact 15.40 acres of suitable foraging, nesting, and wintering habitat for this species. Additionally, noise generated by construction activities and project development during project operation could indirectly impact this species by deterring nesting adjacent to the project site and/or could interfere with the communication between nesting pairs of burrowing owl, resulting in reduced nest success. Accordingly, the proposed project's impact on burrowing owl would be **potentially significant** and the proposed project would be required to implement **Mitigation Measures BIO-11** and **BIO-12**, which require a focused survey for burrowing owl and two burrowing owl take avoidance surveys prior to the initiation of vegetation removal or other construction activities.

Mitigation Measure BIO-11 **Burrowing Owl.** Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist to conduct a focused survey for burrowing owl in accordance with the most recent guidelines (CDFW 2012). The focused survey shall consist of multiple site visits during the breeding season (February 1 to August 31).

If burrowing is observed, the project Applicant shall consult with the CDFW to obtain an Incidental Take Permit. The consultation shall determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate microclimate
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection.

If no burrowing owls are observed, the project Applicant will not need to consult with the CDFW and no compensatory mitigation will be required.

Mitigation Measure BIO-12 **Pre-construction Burrowing Owl Survey.** Prior to the start of construction, the project Applicant shall retain a qualified biologist to conduct two burrowing owl take avoidance surveys. The first survey shall be conducted at least 14 days prior to any site disturbance (grubbing, grading, and construction) and the second shall be conducted within 24 hours of disturbance in accordance with CDFW (2012) guidelines.

If no burrowing owls are observed during the take avoidance surveys, no further measures would be required.

If a burrowing owl or occupied burrow (as indicated by recent burrowing owl sign) is observed, a protective buffer shall be established around the burrow in accordance with CDFW (2012) guidance. The biologist shall stake and flag the protective buffer, and no construction activities shall be allowed within the protective buffer during the breeding season (February 1 through August 31), or until a qualified biologist determines that the burrow is no longer active.

If the burrow is within the project disturbance area, the project Applicant shall consult with CDFW to coordinate relocation of the owl outside of the breeding season (September 1 through January 31) in accordance with accepted protocols. The appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the CDFW. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the CDFW.

With implementation of **Mitigation Measures BIO-11** and **BIO-12**, potential impacts on burrowing owl would be reduced to less than significant.

- **Cooper's hawk** (*Astur cooperii*), **white-tailed kite** (*Elanus leucurus*), and **long-eared owl** (*Asio otus*) are special-status raptor species that have the potential to occur on the project site for foraging and nesting. Implementation of the proposed project would impact 24.50 acres of suitable foraging and nesting habitat for this species. Nests of native bird/raptor species are protected by the MBTA and the California Fish and Game Code and nests of white-tailed kite are also fully protected by CDFW. Removal of vegetation, construction noise and activity adjacent to a nest, and dust from construction activities could impact active nests on or adjacent to the project site. Accordingly, the proposed project's impact to Cooper's hawk, white-tailed kite, and long-eared owl would be **potentially significant** and

the proposed project would be required to implement **Mitigation Measure BIO-13**, which requires that construction activities and vegetation removal to occur outside the nesting bird season, to the extent feasible. If vegetation removal, construction, or grading activities are planned to take place within the active nesting bird season, **Mitigation Measure BIO-13** requires a pre-construction nesting bird survey no more than three days prior to the start of such activities.

Mitigation Measure BIO-13

Nesting Birds/Raptors. To the extent feasible, the project Applicant shall plan for the initiation of construction activities and vegetation removal to occur outside the nesting bird season (February 1 to September 15). If vegetation removal, construction, or grading activities are planned to take place within the active nesting bird season (February 1 through September 15), the project Applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey no more than 3 days prior to the start of such activities. The nesting bird survey shall include the project site and areas within 300 feet of the project site. The qualified biologist shall document the results of the survey in a brief memorandum describing the methods and results of the survey, and describing any protective measures or required follow-up monitoring.

If any active bird nests are found on the project site or within 300 feet of the project site, the qualified biologist shall establish a protective buffer zone around each active nest. The qualified biologist shall determine the size of the protective buffer based on species, the nest location with respect to construction activities, and the nature of the proposed construction activities. In general, the protective buffer shall be a minimum of 50 feet for passerines and 300 feet for raptors. The biologist shall stake and flag the protective buffer, and no construction activities shall be allowed within the protective buffer during the breeding season (February 1 through August 31), or until a qualified biologist determines that the nest is no longer active. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, the protective buffer can be removed and construction activities can proceed within this area.

With implementation of **Mitigation Measure BIO-13**, potential impacts on Cooper's hawk, white-tailed kite, and long-eared owl would be reduced to less than significant.

- **Loggerhead shrike** (*Lanius ludovicianus*), **California horned lark** (*Eremophila alpestris actia*), and **Southern California rufous-crowned sparrow** (*Aimophila ruficeps canescens*) are special-status birds that have potential to occur in upland areas of the project site, while **yellow-breasted chat** (*Icteria virens*) and **yellow warbler** (*Setophaga petechia*) have potential to occur in riparian areas on the project site. Implementation of the proposed project would impact a total of 18.33 acres of potentially suitable habitat for these species. This impact would be considered adverse but less than significant because the amount of habitat loss would be limited compared to the amount available in the project region. However, nests of native bird species are protected by the MBTA and California Fish and Game Code and the removal of vegetation, construction noise and activity adjacent to a nest, and dust from construction activities could impact active nests on or adjacent to the project site, representing a **potentially significant** impact. However, as discussed above, the proposed project would be required to implement **Mitigation Measure BIO-13**, as described above. With implementation of **Mitigation Measure BIO-13**, potential impacts on active nests would be reduced to less than significant.

Mammals. The following provides a discussion of potential impacts on special-status mammal species.

- **Mountain lion** (*Puma concolor*) has the potential to occur on the project site, primarily along Trabuco Creek. As described further under Threshold 4.3.4, the project site is located within a wildlife movement corridor connecting the Santa Ana Mountains with the San Joaquin Hills and mountain lion would be expected to move along Trabuco Creek for movement within the region. As previously discussed, the proposed project has been designed to avoid impacts on Trabuco Creek, with only minor impacts occurring on the upper banks along the edge of Tributary 1 and for placement of footings for the bridge over Trabuco Creek. Therefore, Trabuco Creek would remain open and available for wildlife movement. However, noise and night lighting from construction activity and/or project operation could deter wildlife activity along Trabuco Creek, making it less suitable for wildlife movement. The potential effect of night lighting on wildlife movement, including mountain lion movement, is considered **potentially significant**. Therefore, the proposed project would be required to implement **Mitigation Measures BIO-14** and **BIO-15**, which limits construction night lighting to areas of active work and away from areas of open space, including areas that provide for wildlife movement, and requires City review of the proposed lighting plans to confirm that night lighting is focused on the developed areas and away from Trabuco Creek and areas of open space.

Mitigation Measure BIO-14 **Night Lighting During Construction.** During construction activities, if night work (i.e., between dusk and dawn) is anticipated, night lighting shall be used only in areas of active work and shall be focused on the direct area(s) of work and away from areas of open space, including areas that provide for wildlife movement and potential bat roosts. If night work is needed, the project Applicant shall retain a qualified biologist to conduct a Worker's Environmental

Awareness Program training for the night crew to educate them on the sensitive resources present surrounding the project site that could be affected by night lighting.

Mitigation Measure BIO-15 **Night Lighting of the Project.** Prior to the issuance of a grading permit, the City's Development Services Director, or their designee, shall review the lighting plans for the project to confirm that night lighting is focused on the developed areas and away from Trabuco Creek and areas of open space, including areas that provide for wildlife movement and potential bat roosts.

With implementation of **Mitigation Measures BIO-14** and **BIO-15**, potential impacts on mountain lion would be reduced to less than significant.

- **San Diego desert woodrat** (*Neotoma lepida intermedia*) has the potential to occur on the project site. Implementation of the proposed project would impact 2.93 acres of suitable habitat for this species. San Diego desert woodrat is a Covered species in the NCCP/HCP. Therefore, the proposed project would be subject to the permitting framework and avoidance, minimization, and mitigation measures, and fee program (if applicable) provided in the NCCP/HCP for this species. Compliance with the requirements of the NCCP/HCP would reduce potentially significant impacts on San Diego desert woodrat and no mitigation measure would be required.

- The project site also provides potential foraging habitat for several special-status bat species and potential roosting habitat within the riparian forest, oak woodland, and various abandoned structures and bridges. Bat species with potential to occur on the project site include: **pallid bat** (*Antrozous pallidus*), **western red bat** (*Lasiurus blossevillii*), **western mastiff bat (***Eumops perotis californicus*), **pocketed free-tailed bat** ((*Nyctinomops femorosaccus*), and **big free-tailed bat** (*Nyctinomops macrotis*), as well as common species of bat. Roosting bats are protected by the California Fish and Game Code. Removal of roosting habitat, construction noise and activity adjacent to a maternity roost, and night lighting from construction activities or the project development during operation could impact active roosts on or adjacent to the project site. Accordingly, the proposed project's impact on bats, including special-status bats species, would be **potentially significant**. However, as discussed above, the proposed project would be required to implement **Mitigation Measures BIO-14** and **BIO-15**, which limits construction night lighting to areas of active work and away from areas of open space, including potential bat roosts, and requires City review of the proposed lighting plans to confirm that night lighting is focused on the developed areas and away from Trabuco Creek and areas of open space. In addition, the proposed project would be required to implement **Mitigation Measures BIO-16** and **BIO-17**, which require a pre-construction survey of all suitable structures (e.g., barn, bridges) and trees/vegetation within the project site for bat roosts within 30 days prior to the initiation of construction activities and limits tree trimming, and vegetation removal to outside the bat maternity season (April 1 to August 31) to avoid direct impacts to non-volant (flightless)

young that may roost in oak trees. If trimming or removal of trees during the bat maternity season cannot be avoided, **Mitigation Measure BIO-17** requires a pre-construction survey for roosting bats.

Mitigation Measure BIO-16 **Roosting Bats.** Within 30 days prior to the initiation of construction activities, the project Applicant shall retain a qualified bat biologist to survey all suitable structures (e.g., barn, bridges) and trees/vegetation within the project site for bat roosts. If bat roosts are found within the project site, the qualified bat biologist shall conduct a nighttime emergence survey to identify the bats to the species level to determine if they are common or special-status species. The bat biologist shall prepare a memorandum describing the methodology for tree trimming and removal that would avoid or minimize impacts on bat roosts by excluding bats or timing the disturbance to allow them to safely escape.

Mitigation Measure BIO-17 **Tree Trimming and Removal of Trees Used by Roosting Bats.** To the extent feasible, the project Applicant shall plan for the initiation of construction activities, tree trimming, and vegetation removal to occur outside the bat maternity season (April 1 to August 31) to avoid direct impacts to non-volant (flightless) young that may roost in oak trees. If trimming or removal of trees during the bat maternity season cannot be avoided, the project Applicant shall retain a qualified bat biologist to conduct a pre-construction survey for roosting bats as described in **Mitigation Measure BIO-16**. The project Applicant shall retain a qualified bat biologist to monitor tree trimming and tree removal activities. This can include supervising the two-step tree removal method and checking downed limbs for bats.

With implementation of **Mitigation Measures BIO-14** through **BIO-17**, potential impacts on special-status bat species would be reduced to less than significant.

Nest Parasitism. Brown-headed cowbirds (*Molothrus ater*) have also been reported in open space areas near the project site, including Oso Creek and the Arroyo Trabuco Golf Course, and were incidentally observed on the project site during special-status species surveys in Spring 2026. As this species is frequently associated with cattle and equestrian land uses, the establishment of equestrian stables on the project site may lead to an increase of brown-headed cowbirds on the project site. However, it should be noted that cowbirds frequently commute long distances between foraging and breeding sites each day, with commutes of over 10 miles being recorded. Accordingly, brown-headed cowbird abundance and distribution depends on regional landscape use. The vicinity of the project site already contains many features that support the presence of brown-headed cowbirds in the area, including the San Juan Capistrano Equestrian Center, which is only 0.5 mile south of the project site. The dominant land use type

surrounding the project site, urban and suburban development, is also positively correlated with cowbird occupancy. The northern portion of the project site also contains several existing actively managed agricultural fields that currently provide suitable habitat for foraging brown-headed cowbirds.

The brown-headed cowbird is a non-native brood parasite, which means that it lays its eggs in the nests of similar-sized or smaller birds, and the other birds raise their young. Brown-headed cowbird brood parasitism has contributed to the decline of species listed as Threatened and Endangered, including the least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, as well as other more common songbirds. Recovery efforts for these special-status species include trapping brown-headed cowbirds to remove them from native habitat areas across the region to increase nest productivity of the special-status species.

Given the existing foraging habitat already present within and surrounding the project site, the establishment of additional equestrian facilities as part of the project may incrementally increase local brown-headed cowbird populations, but the increase is not expected to be substantially more than the existing occurrence of this species in the project vicinity. Therefore, while an incremental increase in brown-headed cowbirds would be considered adverse, it would not be considered significant when considering the amount already present in the project vicinity. Therefore, no mitigation would be required

Overall, with implementation of **Mitigation Measures BIO-1** through **BIO-17**, potential impacts on special-status wildlife species would be **less than significant with mitigation incorporated.**

Summary. With implementation of **Mitigation Measures BIO-1** through **BIO-17**, implementation of the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.3.2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

Less Than Significant With Mitigation Incorporated

Discussion of Effects: As discussed above, the proposed project would impact 0.09 acre of special-status riparian communities, including 0.01 acre of sycamore riparian woodland and 0.08 acre of coast live oak riparian forest. These impacts are associated with the realignment of the existing Trabuco Creek Trail, along the edge of Tributary 1, and construction of the footings for the proposed bridge over Trabuco Creek. The sycamore riparian woodland and coast live oak riparian forest are considered sensitive natural communities by CDFW and the loss of 0.09 acre of riparian woodland communities would be considered **potentially significant**. However, as discussed above, the proposed project would be required to implement **Mitigation Measure BIO-9**, which requires the project Applicant obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and Tributary 1, including a Section 1602 Streambed Alteration Agreement from CDFW and

the compensation for the loss of jurisdictional resources and impacts on the existing conservation easement through payment of an in-lieu mitigation fee or preparation and implementation of a Habitat Mitigation and Monitoring Plan. Therefore, with implementation of **Mitigation Measure BIO-9**, potential impacts associated with the loss of riparian woodland communities would be reduced to less than significant.

Implementation of the proposed project would also result in the loss of 0.06 acre of Mexican elderberry woodland, which is considered a sensitive vegetation community by the CDFW. However, on the project site, Mexican elderberry occurs as a few isolated patches surrounded by ruderal habitat. While it provides nesting habitat and cover for small mammals, its value is limited by the small patch sizes. Therefore, although implementation the proposed project would result in the loss of 0.06 acre of Mexican elderberry woodland, this loss would not be considered a substantial adverse effect because the amount of habitat loss would be limited compared to the amount available in the project region, which includes the mesic slopes near Niguel Hill and in the inland southern portions of the NCCP Reserve in the Limestone Canyon Management Area and the Irvine Open Space Preserve. Impacts would be less than significant, and mitigation would be required.

Overall, with implementation of **Mitigation Measure BIO-9**, implementation of the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.3.3: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?

Less Than Significant With Mitigation Incorporated

Discussion of Effects: As provided above, Trabuco Creek and two unnamed tributaries (Tributary 1 and Tributary 2) occur in the southern portion of the project site. According to the jurisdictional delineation conducted for the project site and provided in **Table 4.3.B**, above, Trabuco Creek and the tributaries contain areas designated as non-wetland waters of the United States (WOTUS), wetland WOTUS, non-wetland waters of the state (WOTS), wetland WOTS, and streambeds under the jurisdiction of CDFW. As provided in **Table 4.3.B,** a total of 3.100 acres of waters under the jurisdiction of the USACE (0.430 acre of non-wetland WOTUS and 2.670 acres of wetland WOTUS) occur on the project site; a total of 3.113 acres of waters under the jurisdiction of the RWQCB (0.443 acre of non-wetland WOTS and 2.670 acres of wetland WOTS) occur on the project site; and a total of 11.551 acres of streambed under the jurisdiction of the CDFW occurs on the project site.

Implementation of the proposed project would result in impacts to these jurisdictional waters, as shown in **Table 4.3.C: Project Impacts on Jurisdictional Resources**.

Table 4.3.C: Project Impacts on Jurisdictional Resources

Feature	USACE				RWQCB				CDFW			
	Non-Wetland WOTUS		Wetland WOTUS (acres)		Non-Wetland WOTS		Wetland WOTS (acres)		Streambed/ Riparian (acres)		Linear Feet	
	Existing (acres)	Impact (acres)	Existing (acres)	Impact (acres)	Existing (acres)	Impact (acres)	Existing (acres)	Impact (acres)	Existing (acres)	Impact (acres)	Existing	Impact
Trabuco Creek	0.430	0.000	2.549	0.000	0.430	0.000	2.549	0.000	11.022	0.010	3,100	137.3
Tributary 1	0.000	0.000	0.121	0.000	0.000	0.000	0.121	0.002	0.514	0.083	374	123.7
Tributary 2	0.000	0.000	0.000	0.00	0.013	0.000	0.000	0.00	0.015	0.00	106	0
Total	***0.430***	***0.000***	***2.670***	***0.000***	***0.443***	***0.000***	***2.670***	***0.002***	***11.551***	***0.093***	***3,580***	***261.0***

Source: LSA (2026).
CDFW = California Department of Fish and Wildlife
RWQCB = Regional Water Quality Control Board
USACE = United States Army Corps of Engineers
WOTS = waters of the State
WOTUS = waters of the United States

As provided in **Table 4.3.C**, implementation of the proposed project would not impact any waters under the jurisdiction of the USACE or RWQCB; a total of 0.093 acre of streambed under the jurisdiction of the CDFW (0.010 acre along Trabuco Creek and 0.083 acre along the edge of Tributary 1). Accordingly, the proposed project would have a **potentially significant** impact on jurisdictional waters, including protected wetlands. However, as previously discussed, the proposed project would be required to implement **Mitigation Measure BIO-9**, which requires the Project Applicant obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and Tributary 1, including a Section 1602 Streambed Alteration Agreement from CDFW and the compensation for the loss of jurisdictional resources and impacts on the existing conservation easement through payment of an in-lieu mitigation fee or preparation and implementation of a Habitat Mitigation and Monitoring Plan. Therefore, with implementation of **Mitigation Measure BIO-9** and through the existing Section 1602 Streambed Alteration Agreement regulatory process, implementation of the proposed project would not impact federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.3.4: Would the project create substantial interference 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?

Less Than Significant With Mitigation Incorporated

Discussion of Effects: Trabuco Creek supports terrestrial connectivity, linking the Santa Ana Mountains with the San Joaquin Hills, and aquatic connectivity, as an aquatic linkage between the Santa Ana Mountains and the Pacific Ocean, both locally and at the regional scale. The core of this wildlife linkage occurs along the aquatic (open water), riparian woodland, and coastal sage scrub habitat along Trabuco Creek.

As previously discussed, the proposed project has been designed to avoid impacts to Trabuco Creek, with only minor impacts occurring on the upper banks along the edge of Tributary 1 and for placement of footings for the proposed bridge over Trabuco Creek. The proposed project also includes a community building on the east bank along Camino Capistrano, within the proposed Community Building Core. Noise, vibration, night lighting, and dust from construction activity and/or noise and night lighting associated with project operation could deter wildlife activity along Trabuco Creek, making it less suitable for wildlife movement. Although many of the wildlife species that currently use this stretch of Trabuco Creek are likely somewhat acclimated to the urban-wildland interface due to the project site's proximity to I-5, Camino Capistrano, a school, the railroad bridge, and existing uses of the northern portion of the project site (Swanner House, Putuidem Village, Dr. Joe Cortese Dog Park), construction impacts would be temporary in the immediate vicinity of construction activities. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of the proposed project construction and then re-establish these functions once all temporary construction effects have been removed.[4] In addition, as previously discussed, the proposed project would be required to implement **Mitigation Measure BIO-14**, which limits construction night lighting to areas of active work away from areas of open space, including areas that provide for wildlife movement and potential bat roosts; **Mitigation Measure BIO-16**, which requires a survey of all suitable structures (e.g., barn, bridges) and trees/vegetation within the project site for bat roosts within 30 days prior to the initiation of construction activities; and **Mitigation Measure BIO-17**, which limits tree trimming, and vegetation removal to outside the bat maternity season (April 1 to August 31) to avoid direct impacts to non-volant (flightless) young that may roost in oak trees. If trimming or removal of trees during the bat maternity season cannot be avoided, **Mitigation Measure BIO-17** requires a pre-construction survey for roosting bats. Therefore, construction of the proposed project would not create substantial interference 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.

Following construction, there is potential for increased long-term indirect effects to wildlife movement within Trabuco Creek due to increased noise, lighting, and other anthropogenic disturbance from operation of the proposed project. However, such effects are not expected to substantially change the level of wildlife movement along Trabuco Creek for the following reasons: (1) there is spatial separation between proposed structures and existing riparian and coastal sage scrub habitat; (2) the proposed project is sited in close proximity to existing developments; (3) the proposed lighting plan is designed to have minimal spill into adjacent habitats; and (4) areas adjacent to Trabuco Creek in the vicinity of the project site already experience a high degree of human visitation and associated disturbance. Furthermore, the proposed project would not place any permanent barriers within any known wildlife movement corridors. In addition, as previously discussed, the proposed project would be required to implement **Mitigation Measure BIO-15**, which requires City review of the proposed lighting plans to confirm that night lighting is focused on the developed areas and away from Trabuco Creek and areas of open space, including areas that provide for wildlife movement and potential bat roosts. Therefore, operation of the proposed project would

[4] Bowles, A. E. *Responses of Wildlife to Noise*. 1995.

not create substantial interference 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.

Further, the proposed project would be required to implement various mitigation measures related to the protection of nesting birds that may be present on the project site, including **Mitigation Measures BIO-7, BIO-8, BIO-10, BIO-11, BIO-12**, and **BIO-13**, as described in more detail above.

Overall, with implementation of **Mitigation Measures BIO-7, BIO-8,** and **BIO-10** through **BIO-17**, implementation of the proposed project would not create substantial interference 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. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.3.5: Would the project conflict with the provisions of an approved local, regional or State policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: As described above, the proposed project has been designed to avoid and minimize impacts on Trabuco Creek and the majority of the area designated as Critical Habitat for coastal California gnatcatcher. Furthermore, the primary development area is within the ruderal area that is routinely disked and provides lower habitat value for wildlife species. Therefore, the proposed project would generally be consistent with the City's General Plan goals and policies intending to protect and preserve important ecological and biological resources, and natural features (ridgelines, unique hillside features, and creeks).

Section 9-3.557 of the City's Municipal Code requires the preservation of existing trees and Section 9-2.349 of the City's Municipal Code requires a tree removal permit for any trees that would be removed that are greater than six inches diameter at breast height. The City's Municipal Code also requires that heritage trees are preserved, and encourages the use of native, drought resistant and California-friendly trees. The proposed project has been generally designed to retain all the existing trees on the project site, some of which may be heritage trees. In the event that tree removal is required in the future, the Applicant would be required to adhere to the City's tree removal permit process, which requires discretionary review and approval (which may include CEQA review) and mitigation would be prescribed at that time.

Additionally, there is an existing conservation easement along Trabuco Creek that was established as mitigation for a previous project. As previously discussed, the proposed project has been designed to avoid impacts on the conservation easement, with only minor impacts occurring on the upper banks along the edge of Tributary 1 and for placement of footings for the proposed bridge across Trabuco Creek. However, implementation of **Mitigation Measures BIO-7** and **BIO-9** would reduce this impact on the conservation easement to less than significant. **Mitigation Measure BIO-7** requires consultation with the USFWS to obtain a Biological Opinion/Incidental Take Permit for the loss of coastal sage scrub habitat occupied by coastal California gnatcatcher through payment of an in-lieu

mitigation fee or preparation and implementation of a Habitat Mitigation and Monitoring Plan and **Mitigation Measure BIO-9** requires the Project Applicant obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and Tributary 1, including a Section 1602 Streambed Alteration Agreement from CDFW and the compensation for the loss of jurisdictional resources and impacts on the existing conservation easement through preparation and implementation of a Habitat Mitigation and Monitoring Plan.

Overall, with implementation of **Mitigation Measures BIO-7** and **BIO-9,** the proposed project would not conflict with the provisions of an approved local, regional or State policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.3.6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

Less Than Significant With Mitigation Incorporated

Discussion of Effects: The project site is within the Coastal Subregion of the Orange County Central-Coastal NCCP/HCP. According to the BRA prepared for the proposed project (**Appendix E**), the proposed project is generally compatible with the provisions of the NCCP/HCP.

As discussed above under Threshold 4.3.1, the proposed project would be required to adhere to permitting framework and avoidance, minimization, and mitigation measures, and fee program (if applicable) provided in the NCCP/HCP for NCCP/HCP Covered species. However, portions of Trabuco Creek are designated as an "Existing Use" area under the NCCP/HCP Planning Area, which indicates that the City should make its best effort to obtain conservation easements[5] over privately-owned lands to assure that natural vegetation along these linkages is retained. The project would impact 3.35 acres of Existing Use areas under the NCCP/HCP; of this, 0.18 acre[6] of coastal sage scrub habitat suitable for coastal California gnatcatcher. These areas are also designated as Critical Habitat for the coastal California gnatcatcher. However, much of these areas consists of habitat that is not considered suitable for the coastal California gnatcatcher. Impacts to Existing Use areas are not covered under the NCCP/HCP and **Mitigation Measure BIO-7** would be required. As discussed above, **Mitigation Measure BIO-7** requires consultation with the USFWS to obtain a Biological Opinion/Incidental Take Permit for the loss of coastal sage scrub habitat occupied by coastal California gnatcatcher through payment of an in-lieu mitigation fee or preparation and implementation of a Habitat Mitigation and Monitoring Plan. The consultation would determine the appropriate compensatory mitigation for the loss of coastal sage scrub and other habitat within the Existing Use area; impacts on Critical Habitat; and impacts on the existing conservation easement. The proposed project would also be required to implement **Mitigation Measure BIO-8**, which details the construction-related minimization mitigation measures that would be required to be

[5] The NCCP/HCP text specifically states that "the failure or inability to obtain a conservation easements over private lands located within Existing Use areas shall not be deemed a breach of the NCCP/HCP...".

[6] There is also 0.10 acre of coastal sage scrub habitat located west of Trabuco Creek, outside of the Critical Habitat/Existing Use area.

implemented during vegetation clearing, consistent with NCCP/HCP construction-related minimization mitigation measures.

Overall, with implementation of **Mitigation Measures BIO-7** and **BIO-8,** the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Impacts would be **less than significant with mitigation incorporated**.

4.3.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for biological resources. The cumulative impact area for biological resources related to the proposed project is the City of San Juan Capistrano and includes the projects provided in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures.

As described above, implementation of the proposed project would not result in significant impacts related to federal and State-listed species, waters of the U.S. or wetlands, migratory birds and wildlife movement with implementation of **Mitigation Measures BIO-1** through **BIO-17**. Therefore, implementation of the proposed project would not have a significant individual impact on biological resources. Each discretionary development proposal received by the City, including the past, present, and future projects listed in **Table 4.A**, would be required to comply with the requirements of CEQA, including an environmental review as applicable, to determine if the project would have a significant impact on biological resources. If a project is determined to have a potentially significant impact related to biological resources, project-specific mitigation would be identified and prescribed in order to reduce any potentially significant impacts to biological resources. In addition, past, present, and future projects would also be required to demonstrate consistency with City's General Plan goals and policies intending to protect and preserve important ecological and biological resources, and natural features, and would be required to adhere to the City's Municipal Code related to tree protection.

In addition, the project site is within the Coastal Subregion of the Orange County Central-Coastal NCCP/HCP and would be generally compatible with the provisions of the NCCP/HCP. Although implementation of the proposed project would result in the loss of 3.35 acres designated as Critical Habitat for the coastal California gnatcatcher along Trabuco Creek, the proposed project includes **Mitigation Measures BIO-7,** which would require project impacts be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). Accordingly, the loss of this habitat would not result in a substantial adverse effect at the regional level. Other past, present, and future projects, including those listed in **Table 4.A**, that would be within the NCCP/HCP would also be required to demonstrate compatibility with the provisions of the NCCP/HCP and if those projects would result in the loss of critical habitat, would be required to implement measures similar to **Mitigation Measures BIO-7** to address those impacts. Specifically, the CalTrout Trabuco Creek Fish Ladder Project, which includes the construction of engineered hydraulic fishway structures and channel improvements within Trabuco Creek in order to restore aquatic connectivity and remediate fish-passage barriers, would be developed within Trabuco Creek at and around the project site.

Implementation of the CalTrout Trabuco Creek Fish Ladder Project would likely impact or result in the loss of areas designated as Critical Habitat for the coastal California gnatcatcher along Trabuco Creek and would require project-specific mitigation to address potential impacts.

Implementation of the proposed project would also result in the loss of areas of Mexican elderberry woodland, which is considered a sensitive vegetation community by the CDFW. However, as discussed above, this loss would not be considered a substantial adverse effect because the amount of habitat loss would be limited compared to the amount available in the project region.

In addition, although implementation of the proposed project would impact a total of 0.093 acre of streambed under the jurisdiction of the CDFW, the proposed project would be required to obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and Tributary 1, including a Section 1602 Streambed Alteration Agreement from CDFW and the compensation for the loss of jurisdictional resources and impacts on the existing conservation easement through payment of an in-lieu mitigation fee or preparation and implementation of a Habitat Mitigation and Monitoring Plan. In addition, the amount of impacted waters would be relatively minimal (less than 0.10 acre) and would not be considered adverse because the amount of impacts would be limited compared to the amount remaining in the project region. Further, other past, present, and future projects, including those listed in **Table 4.A**, that would result in impacts to similar jurisdictional waters would also be required to adhere to existing regulatory schemes, which would address those impacts. Specifically, the CalTrout Trabuco Creek Fish Ladder Project would likely impacts on jurisdictional waters and would require project-specific mitigation, including obtaining permits from the CDFW, to address potential impacts.

Therefore, when considered in conjunction with past, present, and probable future projects, the cumulative impact on biological resources from implementation of the proposed project and the cumulative projects would be **less than cumulatively considerable.**

4.3.8 Level of Significance Prior to Mitigation

Impacts related to biological resources would be potentially significant without implementation of mitigation.

4.3.9 Regulatory Compliance Measures and Mitigation Measures

4.3.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are applicable to the proposed project.

Regulatory Compliance Measure HYD-1	**Construction General Permit.** (Refer to Section 4.9, Hydrology and Water Quality.)
Regulatory Compliance Measure HYD-2	**Erosion and Sediment Control Plans.** (Refer to Section 4.9, Hydrology and Water Quality.)
Regulatory Compliance Measure HYD-3	**Water Quality Management Plan.** (Refer to Section 4.9, Hydrology and Water Quality.)

4.3.9.2 Mitigation Measures

Mitigation Measure BIO-1

Special-Status Plant Species. Prior to the initiation of vegetation clearing or other construction activities, a focused survey shall be conducted at the appropriate peak flowering season of the target special-status plant species. If special-status species are observed within the project site, the impact shall be evaluated based on the size and status of the species observed. If no special-status plant species are observed, then no further mitigation shall be required.

California Rare Plant Ranks (CRPR) 1B and 2B Species. If any CRPR 1B or 2B species are present, impacts would be considered potentially significant and mitigation would be required to address potential impacts and reduce them to less than significant. If no known individuals of the species would be impacted, then no further mitigation would be required.

The project Applicant shall consider whether the design could be revised to avoid or minimize impacts on the species location(s). If the species cannot be avoided, then the project Applicant shall coordinate with Development Services Director of the City of San Juan Capistrano (City), or their designee, to determine the mitigation strategy. The mitigation strategy may include: (1) on-site preservation or enhancement; (2) purchase of credits from an approved mitigation bank; (3) translocation of this species to an off-site mitigation site. If translocation is selected, the project Applicant shall prepare a Rare Plant Mitigation Plan for review and approval by the USFWS and CDFW. The Rare Plant Mitigation Plan shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria
- Mitigation site selection
- Methodology for collecting seed and translocating corms (including storage)
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection
-

Mitigation Measure BIO-2

Crotch's Bumble Bee. Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist with expertise in surveying for native bumble bees. The qualified biologist shall conduct a focused survey for Crotch's bumble bee in accordance with the most recent CDFW

guidelines (CDFW 2023). The focused survey shall consist of three site visits during the colony active period (April through August).

If Crotch's bumble bee is observed, the project Applicant shall obtain an Incidental Take Permit from CDFW prior to removal of habitat for this species. The project Applicant shall consult with CDFW to determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate microclimate
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

If no Crotch's bumble bees are observed, the project Applicant will not need to obtain an Incidental Take Permit, and no compensatory mitigation will be required.

Mitigation Measure BIO-3

Crotch's Bumble Bee Biological Monitoring. Regardless of the results of the focused survey conducted for **Mitigation Measure BIO-2,** CDFW survey guidelines require biological monitoring during vegetation removal. A qualified biological monitor shall be present during the clearing of vegetation when Crotch's bumble bees are active (i.e., February 1 through October 31). The biological monitor shall confirm that the project limits are clearly marked and that vegetation removal and construction staging occur only within the project limits. No biological monitoring would be needed from November 1 through January 31.

If Crotch's bumble bee is observed during the biological monitoring, the project Applicant shall contact CDFW, and an Incidental Take

Permit shall be obtained as described above under **Mitigation Measure BIO-2.**

Mitigation Measure BIO-4 **Overwintering Monarch Butterflies.** Prior to the removal of any mature trees during the monarch overwintering season (October 1-March 31), the project Applicant shall retain a qualified biologist to survey the tree(s) to be removed, as well as any trees located within 100 feet, for presence of overwintering monarch butterflies. The survey shall be conducted during the overwintering season, during appropriate conditions. Surveys must be conducted before 10:00 a.m., at a temperature not to exceed 55 degrees Fahrenheit, with no rain or strong winds.

If overwintering monarchs are observed within the project site, the host tree(s) shall be protected for the duration of the overwintering season. To prevent any impacts to the microclimate of the roost, a protective buffer of at least 100 feet shall be implemented, within which mature trees shall not be removed during the overwintering season.

Mitigation Measure BIO-5 **Water Quality.** Grading and construction resulting in ground disturbance should occur within the typical dry season (April 15 through October 15), as feasible, to avoid erosion and sedimentation impacts to nearby creeks and water quality. The Director of the City of San Juan Capistrano Development Services Department, or designee, shall verify that project plans require the Construction Contractor to install adequate erosion and sedimentation barriers (e.g., silt fencing) prior to ground disturbance to prevent any sediment-laden runoff or debris from entering on-site waterways during the wet season or periods of rain.

This silt fencing will also serve as a temporary barrier to wildlife entering work areas during construction. The barriers shall consist of 3-foot-tall silt fencing buried to a depth of at least 6 inches below the soil surface along the outer limits of all work areas (or as otherwise required by the storm water pollution and prevention plan). These barriers shall be inspected daily by construction personnel and maintained and repaired as necessary for the duration of construction to ensure that they are functional and are not a hazard to wildlife on the outer side of the fence. All barriers shall be removed following completion of construction.

Mitigation Measure BIO-6 **Southwestern Pond Turtle.** Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist to conduct a focused survey for southwestern pond turtle in accordance with the most recent

guidelines (USGS 2006). The focused survey shall consist of multiple site visits during the active period (April through August).

If southwestern pond turtle is observed, the project Applicant shall conduct a Section 7 Conference with the USFWS and shall also consult with the CDFW associated with jurisdictional permitting described under **Mitigation Measure BIO-8.** The project Applicant shall consult with the USFWS/CDFW to determine the appropriate avoidance and minimization measures (e.g., pre-construction surveys, biological monitoring, exclusion fencing) to avoid direct mortality of this species. The consultation shall also determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate hydrology
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

If no southwestern pond turtles are observed, the project Applicant will not need to consult with the USFWS/CDFW, and no compensatory mitigation will be required.

Mitigation Measure BIO-7

Coastal Sage Scrub/Coastal California Gnatcatcher Habitat. Prior to issuance of a grading permit, the project Applicant shall consult with the USFWS to obtain a Biological Opinion/Incidental Take Permit for the loss of coastal sage scrub habitat occupied by coastal California gnatcatcher. The consultation shall determine the appropriate compensatory mitigation for the loss of coastal sage scrub and other habitat within the Existing Use area; impacts on Critical Habitat; and impacts on the existing conservation easement. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., one acre of mitigation for each acre of habitat impacted). The mitigation

strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at an approved mitigation bank; or a combination of these approaches, as approved by USFWS. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate hydrology
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

Mitigation Measure BIO-8

Standard Avoidance and Minimization Measures for Coastal California Gnatcatcher. During vegetation clearing, the NCCP/HCP requires the following construction-related minimization mitigation measures:

a. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers shall occur during the breeding season (i.e., February 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures," are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures, and emergency facility repairs. In the event of such public health and safety circumstances, the project Applicant shall provide USFWS/CDFW with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens, and any other coastal sage scrub Covered Species that are not otherwise flushed and shall carry out the following measures only to the extent as practicable in the context of the public health and safety considerations.

b. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations

or other activities involving disturbance of coastal sage scrub, a survey shall be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.

c. A monitoring biologist, acceptable to USFWS/CDFW shall be onsite during any clearing of coastal sage scrub. The project Applicant shall advise USFWS/CDFW at least 7 calendar days prior to the clearing of any habitat occupied by Covered Species to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing capture activities. The monitoring biologist shall flush Covered Species (avian or other mobile Covered Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they shall be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It shall be the responsibility of the monitoring biologist to assure that Covered Bird Species shall not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.

d. Following the completion of initial grading/earth movement activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel shall be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment shall be permitted within such marked areas.

e. In areas bordering the NCCP Reserve System containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations shall be restricted to a minimum number during construction consistent with Project construction requirements. Waste dirt or rubble shall not be deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operators shall be conducted and documented to ensure maximum practicable adherence to these measures.

f. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction

areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.

Mitigation Measure BIO-9 **Riparian Habitat/Jurisdictional Permitting.** Prior to issuance of a grading permit, the project Applicant shall obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and Tributary 1, including a Section 1602 Streambed Alteration Agreement from CDFW. The project Applicant shall consult with each agency to determine the appropriate compensatory mitigation for the loss of jurisdictional resources and impacts on the existing conservation easement. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of jurisdiction impacted). The mitigation strategy may include preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at an approved mitigation bank; or a combination of these approaches, as approved by the permitting agency. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate hydrology
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection

Mitigation Measure BIO-10 **Focused Riparian Birds Survey.** Prior to commencing construction activities, the project Applicant shall retain a qualified biologist to conduct a protocol focused survey for least Bell's vireo and southwestern willow flycatcher. The surveys shall be conducted in accordance with the latest USFWS survey protocol for each species. Focused surveys for least Bell's vireo shall occur between April 10 and July 31 (USFWS 2001). Focused surveys for southwestern willow flycatcher shall occur between May 15 and July 17 (USFWS 2010).

If least Bell's vireo and/or southwestern willow flycatcher are observed on or adjacent to the project site, the project Applicant shall consult with the USFWS and CDFW to obtain a Biological Opinion/Incidental Take Permit. The consultation shall also determine the appropriate compensatory mitigation for the loss of

riparian habitat and appropriate avoidance and minimization measures for these species. Avoidance and minimization measures may include, but would not be limited to, restriction on removal of riparian vegetation during the breeding season (March 15 to September 15), pre-construction surveys (if work occurs within 500 feet of Trabuco Creek during the breeding season), protective buffers (if an active nest is observed), biological monitoring, and/or noise monitoring/noise abatement measures (if needed). These measures shall be incorporated into the regulatory permits described above under **Mitigation Measure BIO-9**.

If neither least Bell's vireo nor southwestern willow flycatchers are observed, the project Applicant will not need to obtain a Biological Opinion/Incidental Take Permit for these species. However, jurisdictional permitting described under **Mitigation Measure BIO-9** would still be required.

Mitigation Measure BIO-11

Burrowing Owl. Prior to the initiation of vegetation removal or other construction activities, the project Applicant shall retain a qualified biologist to conduct a focused survey for burrowing owl in accordance with the most recent guidelines (CDFW 2012). The focused survey shall consist of multiple site visits during the breeding season (February 1 to August 31).

If burrowing is observed, the project Applicant shall consult with the CDFW to obtain an Incidental Take Permit. The consultation shall determine the appropriate compensatory mitigation for the loss of habitat for this species. Project impacts shall be compensated at no less than a 1:1 ratio (i.e., 1 acre of mitigation for each acre of habitat impacted). The mitigation strategy may include: preservation, enhancement, or restoration of on-site habitat; preservation, enhancement, or restoration of off-site habitat; purchase of credits at a CDFW-approved mitigation bank; or a combination of these approaches, as approved by CDFW. If preservation, enhancement, or restoration would be used, a Habitat Mitigation and Monitoring Plan shall be prepared and shall include the following:

- Responsibilities of the parties implementing the plan
- Performance criteria related to vegetation structure and diversity
- Mitigation site selection with appropriate microclimate
- Seed mix and planting palette
- Site preparation and installation methodology
- Maintenance and monitoring schedule
- Contingency plan
- Long-term site protection.

If no burrowing owls are observed, the project Applicant will not need to consult with the CDFW and no compensatory mitigation will be required.

Mitigation Measure BIO-12

Pre-construction Burrowing Owl Survey. Prior to the start of construction, the project Applicant shall retain a qualified biologist to conduct two burrowing owl take avoidance surveys. The first survey shall be conducted at least 14 days prior to any site disturbance (grubbing, grading, and construction) and the second shall be conducted within 24 hours of disturbance in accordance with CDFW (2012) guidelines.

If no burrowing owls are observed during the take avoidance surveys, no further measures would be required.

If a burrowing owl or occupied burrow (as indicated by recent burrowing owl sign) is observed, a protective buffer shall be established around the burrow in accordance with CDFW (2012) guidance. The biologist shall stake and flag the protective buffer, and no construction activities shall be allowed within the protective buffer during the breeding season (February 1 through August 31), or until a qualified biologist determines that the burrow is no longer active.

If the burrow is within the project disturbance area, the project Applicant shall consult with CDFW to coordinate relocation of the owl outside of the breeding season (September 1 through January 31) in accordance with accepted protocols. The appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the CDFW. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the CDFW.

Mitigation Measure BIO-13

Nesting Birds/Raptors. To the extent feasible, the project Applicant shall plan for the initiation of construction activities and vegetation removal to occur outside the nesting bird season (February 1 to September 15). If vegetation removal, construction, or grading activities are planned to take place within the active nesting bird season (February 1 through September 15), the project Applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey no more than 3 days prior to the start of such activities. The nesting bird survey shall include the project site and areas within 300 feet of the project site. The qualified biologist shall

document the results of the survey in a brief memorandum describing the methods and results of the survey, and describing any protective measures or required follow-up monitoring.

If any active bird nests are found on the project site or within 300 feet of the project site, the qualified biologist shall establish a protective buffer zone around each active nest. The qualified biologist shall determine the size of the protective buffer based on species, the nest location with respect to construction activities, and the nature of the proposed construction activities. In general, the protective buffer shall be a minimum of 50 feet for passerines and 300 feet for raptors. The biologist shall stake and flag the protective buffer, and no construction activities shall be allowed within the protective buffer during the breeding season (February 1 through August 31), or until a qualified biologist determines that the nest is no longer active. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, the protective buffer can be removed and construction activities can proceed within this area.

Mitigation Measure BIO-14 **Night Lighting During Construction.** During construction activities, if night work (i.e., between dusk and dawn) is anticipated, night lighting shall be used only in areas of active work and shall be focused on the direct area(s) of work and away from areas of open space, including areas that provide for wildlife movement and potential bat roosts. If night work is needed, the project Applicant shall retain a qualified biologist to conduct a Worker's Environmental Awareness Program training for the night crew to educate them on the sensitive resources present surrounding the project site that could be affected by night lighting.

Mitigation Measure BIO-15 **Night Lighting of the Project.** Prior to the issuance of a grading permit, the City's Development Services Director, or their designee, shall review the lighting plans for the project to confirm that night lighting is focused on the developed areas and away from Trabuco Creek and areas of open space, including areas that provide for wildlife movement and potential bat roosts.

Mitigation Measure BIO-16 **Roosting Bats.** Within 30 days prior to the initiation of construction activities, the project Applicant shall retain a qualified bat biologist to survey all suitable structures (e.g., barn, bridges) and trees/vegetation within the project site for bat roosts. If bat roosts are found within the project site, the qualified bat biologist shall conduct a nighttime emergence survey to identify the bats to the species level to determine if they are common or special-status species. The bat biologist shall prepare a memorandum describing

the methodology for tree trimming and removal that would avoid or minimize impacts on bat roosts by excluding bats or timing the disturbance to allow them to safely escape.

Mitigation Measure BIO-17 **Tree Trimming and Removal of Trees Used by Roosting Bats.** To the extent feasible, the project Applicant shall plan for the initiation of construction activities, tree trimming, and vegetation removal to occur outside the bat maternity season (April 1 to August 31) to avoid direct impacts to non-volant (flightless) young that may roost in oak trees. If trimming or removal of trees during the bat maternity season cannot be avoided, the project Applicant shall retain a qualified bat biologist to conduct a pre-construction survey for roosting bats as described in **Mitigation Measure BIO-16**. The project Applicant shall retain a qualified bat biologist to monitor tree trimming and tree removal activities. This can include supervising the two-step tree removal method and checking downed limbs for bats.

Mitigation Measure HYD-1 **Equestrian-Related Water Quality Best Management Practices (BMPs).** (Refer to Section 4.9, Hydrology and Water Quality.)

4.3.10 Level of Significance after Mitigation

With implementation of **Mitigation Measure BIO-1** through **BIO-17** and **Mitigation Measure HYD-1**, impacts related to biological resources would be less than significant.

4.4 CULTURAL RESOURCES

This section describes existing cultural resources conditions within and in the vicinity of the project site and identifies potentially significant impacts to such resources that may result from implementation of the proposed Legacy Ranch Project (proposed project).

Cultural resources are sites, buildings, structures, objects, and districts that may have traditional or cultural value for their historical significance. Examples of cultural resources include precontact (Native American) and historic-period archaeological sites, and historic buildings and bridges of architectural significance. The California Environmental Quality Act (CEQA) requires agencies that are considering projects that are subject to discretionary action to consider the potential impacts on cultural resources that may occur from project implementation (see Section 15064.5 and Appendix G of the *State CEQA Guidelines*).

The information in this section is based, in part, on the Cultural Resources Assessment (CRA) prepared by LSA in January 2026.[1] The CRA is provided in **Appendix F** to this Draft Environmental Impact Report (EIR).

4.4.1 Scoping Process

The City of San Juan Capistrano (City) received no comments during the scoping period for this Draft EIR (November 13 through December 15, 2025) concerning the proposed project's potential impacts on cultural resources. In addition, no comments pertaining to cultural resources were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** to this Draft EIR.

4.4.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, Orange County. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, The Groves Apartments (senior living residential community) to the south, and an Orange County Transportation Authority-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route.

The irregularly shaped project site is currently developed with the historic Roger Y. Williams/ Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site. Trabuco Creek and the Trabuco Creek Trail traverse the project urban conservation easements. In addition, an unnamed tributary to Trabuco Creek (Tributary 1) is located on the eastern portion of the project site, south of the existing barn and associated storage containers. Another concrete lined tributary (Tributary 2) to Trabuco Creek, lies further to the south on the project site. Vegetation includes grasses, shrubs, and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek. In

[1] LSA. 2026. *Archaeological Survey of the 65.5-Acre Legacy Ranch Project, 30093 Camino Capistrano, San Juan Capistrano, Orange County, California*. January.

addition, there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site.

4.4.2.1 Geomorphology

The project site is located on a wide level alluvial deposit that lies along the east side of Oso Creek and is situated on the western flank of the Peninsular Ranges geomorphic province. This region is characterized by a series of northwesterly trending mountain ranges separated by northwesterly trending valleys and subparallel faults branching from the San Andreas Fault. These ranges are essentially a series of fault-bounded blocks that dip gently to the west and have a steep eastern escarpment. This province extends from the tip of Baja California to the Transverse Ranges north of the Los Angeles Basin. The width of the province varies from 30 miles to 225 miles, with a maximum landbound width of 65 miles. The Los Angeles Basin and the island group (the Channel Islands of Santa Catalina, Santa Barbara, and the distinctly terraced San Clemente and San Nicolas Islands), together with the surrounding continental shelf (cut by deep submarine fault troughs), are included in this province. The rocks of the Peninsular Ranges geomorphic province are typically composed of Jurassic-age metasedimentary and metavolcanic as well as Cretaceous-age igneous rocks of the Southern California batholith. These older rock units are, in turn, capped by limited exposures of Cretaceous to recent marine and terrestrial sedimentary deposits composed of clay, silt, sand, gravel, and cobbles. The primary sediment source for the geologic formations in this province is the uplifted Southern California batholith.

The project site is situated at an elevation of 180 to 200 feet along the east side of Oso Creek and on the west side of Trabuco Creek and Camino Capistrano. This area is within a major drainage of the hills inland of South Laguna in the southern portion of Orange County, approximately four miles inland of Doheny State Beach.

Geologically, most of Orange County is a floodplain composed of recent Holocene colluvium and alluvium less than 10,000 years old. Alluvium is sediment deposited by rivers or streams. Colluvium consists of unconsolidated sediment deposited at the base of hills by rain wash, sheetwash, downslope creep, or a combination of these actions. The San Joaquin Hills from Newport Bay south to Laguna Canyon, and the adjacent coastal hills south to Dana Point and San Juan Capistrano, contain a variety of geologic formations. The project site is situated along the bottom of a major drainage, and as such, it contains primarily alluvium.

While most of the lower coastal areas along the Pacific Coast Highway (State Route 1) are late Pleistocene/Holocene marine terrace deposits, Morton and Miller[2] identify the entire project site, as well as most of the nearby Oso Creek, Trabuco Creek, and San Juan Creek drainages, as recent Holocene alluvium and colluvium.

A less extensive nearby formation that is visible along the exposed and eroded coastal bluffs and in the nearby hills is the middle Miocene San Onofre Breccia. The San Onofre Breccia contains angular

[2] Morton, Douglas M., and Fred K. Miller. 2006. Geologic Map of the *San Bernardino* and *Santa An*a 30-minute by 60-minute quadrangles, California. Digital preparation by Pamela M. Cosette and Kelly R. Bovard. Prepared by the United States Geological Survey (USGS) in cooperation with the California Geological Survey. USGS Open File Report 2006-1217. Map Scale 1:100,000.

rocks of Catalina Schist as well as other lithic materials. Prehistoric people used clasts from the San Onofre Breccia to manufacture ground and flaked stone tools.

4.4.2.2 Prehistoric Background

The development of a regional chronology marking the major stages of cultural evolution in the Southern California area is an important topic for archaeological research. In general, prehistoric cultural developments in Southern California have occurred gradually and have shown long-term stability. Accordingly, developing chronologies and applying them to specific locales can be problematic. In the Southern California area, researchers have used changing artifact assemblages and evolving ecological adaptations to divide regional prehistory into four time periods, or "cultural horizons:" the Early Period, the Milling Stone Period, the Intermediate Period, and the Late Period.

Early Period (Prior to 6000 BC). The Early Period (also known as the Hunting Period) covers the interval from the first presence of humans in Southern California until post-glacial times (5500 to 6000 BC). Artifacts and cultural activities from this period represent a predominantly hunting culture. Diagnostic artifacts from this period include extremely large, often fluted bifaces associated with use of the spear and the atlatl. In Southern California, important Early Period sites have been found near prehistoric Lake Mohave and along the San Dieguito River. Early sites dating to ca. 10,000 years ago and older have also been documented in Santa Barbara County and the northern Channel Islands. Evidence at sites dating to the Terminal Pleistocene and Early Holocene increasingly suggests that the early inhabitants of coastal California relied on marine resources and seeds, possessing an adaptation quite distinct from the big game hunters of the Great Plains.

Milling Stone Period (6000 BC–3000 BC). The transition from the Early Period to the Milling Stone Period is marked by an increased emphasis on the processing of seeds and edible plants and is estimated to have occurred between 6000 BC and 3000 BC. Wild seeds and edible plants formed the primary food source during this period, with only limited use of shellfish and faunal resources. During this period, plant resources were processed using deep-basined mills and handstones, hence the term Milling Stone Period. Milling Stone Period settlements were larger and were occupied for longer periods of time than Early Period sites. Milling Stone Period mortuary practices included both flexed and extended burials, as well as reburials. Grave offerings from this time were few, although rock cairns were sometimes placed over the bodies.

Diagnostic artifacts recovered from Milling Stone Period archaeological sites include metates, manos, and large projectile points, indicating the continued use of darts and atlatls. Among the more enigmatic artifacts from this period are discoidals and cogged stones. Discoidals are round to ovoid groundstones with flat or slightly convex faces and edges, while cogged stones are discoidals with serrated edges resembling the teeth on gears. Both types of artifacts appear sometime around 4000 BC and are dated to the Milling Stone Period. Although the purpose of cogged stones and discoidals is not known, they may have had a ceremonial function.

Two possible scenarios could explain cultural changes that occurred during the Milling Stone Period. It is possible that both scenarios occurred simultaneously in different geographical areas. In some regions such as western San Diego County, Milling Stone cultures may have evolved gradually as the earlier hunting peoples learned to exploit a wider variety of food resources. In other coastal areas,

people migrating from interior regions may have brought new seed and plant food processing technologies with them as they moved to the coast. Evidence for such migrations may be found in climatic data. The onset of the Milling Stone Period corresponds to an interval of warm, dry weather known as the Altithermal, during which many inland lakes disappeared. This would have made inland regions less habitable, triggering the coastal migrations thought to have occurred at this time.

Intermediate Period (3000 BC–AD 500). By approximately 3000 BC, the inhabitants of Southern California were exploiting a diverse array of food resources, including seeds and edible plants, shellfish, fish, and mammals. Along the coast, a greater reliance was placed on marine food resources as evidenced by the recovery of near-shore and pelagic (deep-water) fish remains from archaeological sites. In the interior regions such as the Mojave Desert, the return of cooler, moister conditions led to increased populations along streams and lakes. Hunting appears to have been the primary food-gathering activity in these interior areas. The best-known Intermediate Period sites are located at Pinto Basin in northeastern Riverside County.

Although the mano and metate are still used, Intermediate Period sites are characterized by the appearance of the mortar and pestle. In inland and desert sites, projectile points are generally still large although somewhat smaller than in older sites, but small Rose Spring projectile points appear during the later portion of this period. The introduction of the mortar and pestle may indicate an increased reliance on acorns as a food source, while small projectile points suggest that the bow and arrow was in limited use. Intermediate Period burials were generally flexed in a face down position, although a site at Big Tujunga Wash in the San Fernando Valley contained both reburials under stone cairns and cremations.

Late Period (AD 500–1769). The Late Period, which began approximately AD 500, witnessed a number of important cultural developments in Southern California, including the concentration of larger populations in settlements and communities, greater utilization of the available food resources, and the development of regional subcultures. Cremation was the preferred method of interment during the Late Period, and elaborate mortuary customs and abundant grave goods were common. Other cultural traits diagnostic of the Late Period include an increased use of the bow and arrow, steatite containers, circular shell fishhooks, asphaltum as an adhesive, bone tools and personal ornaments of bone, shell, and stone. Because many of these artifacts are also recovered from earlier periods, other indicators must sometimes be used to distinguish Late Period sites. Among the most useful of these indicators are lithic artifacts manufactured from obsidian. Obsidian from Obsidian Buttes at the Salton Sea was used sporadically in the manufacture of lithic artifacts until sometime after AD 1000, when its use in the Los Angeles Basin became much more common.

A number of the cultural elements found in Southern California during the Late Period have been linked to the migration of Uto-Aztecan speaking peoples from the Great Basin; these traits include the manufacture of ceramics, the use of small triangular arrow points, and interment by cremation. The date of the Uto-Aztecan migration (which probably occurred in several successive waves over an extended period of time) remains uncertain; it has been dated as early as 2000 BC and as late as AD 700. Linguistic evidence suggests a date of AD 1 to 500. The latter part of the Late Period (AD 1200–1769) is often given its own period, the Protohistoric Period. General inferences about the use of plants and animals mostly come from archaeological and ethnographic research related to this period.

4.4.2.3 Ethnographic Period

At the time of European contact, the Gabrielino Indians inhabited most of what is now known as the Los Angeles Basin. The Gabrielino were one of the most extensive native groups in Southern California and much of what we know about native people comes from our knowledge of the Gabrielino.

The name Gabrielino refers to the Uto-Aztecan (Takic) speaking Native Americans who occupied an extensive area, inhabiting most of what are now Los Angeles and Orange Counties and who were historically affiliated with Mission San Gabriel Arcángel. Today, some of the Gabrielino prefer to call themselves by their traditional name, Tongva.

Gabrielino territory included the watersheds of the Los Angeles River, San Gabriel River, and portions of the Santa Ana River; several smaller intermittent streams in the Santa Monica and Santa Ana Mountains; all of the Los Angeles Basin; the coast from Aliso Creek north to a point between Topanga and Malibu Creeks; and the islands of San Clemente, San Nicolas, and Santa Catalina.

The Gabrielino Indians practiced a hunter-gatherer lifestyle, and lived in permanent communities near the convergence of two or more environmental zones or habitats[3] with populations generally ranging from 50–100 inhabitants. They maintained permanent geographical territories that seem to have averaged 30 square miles, establishing seasonal camps along the coast and near bays and estuaries where they hunted primarily rabbit and deer, gathered shellfish and hunt waterfowl, and collected and processed plant foods such as acorns, buckwheat, chia, berries, and fruit.

Gabrielino culture was characterized by an active and elaborate system of rituals and ceremonies. Rituals included individual rites of passage, village rites, seasonal ceremonies, and participation in the widespread Chinigchinich cult. The cult of the culture hero Chinigchinich was observed and recorded by Franciscan Friar Gerónimo Boscana during his residences at Missions San Juan Capistrano and San Luis Rey.

Juaneño. The native group south of the Gabrielino, and who inhabited a much smaller area than the Gabrielino, was the Juaneño. The Juaneño were affiliated with Mission San Juan Capistrano, after which they were named and they occupied the project site and vicinity. Some Juaneño refer to themselves as Acjachemen (alternative spellings: Acagchemem and Acjachemem), and one group is recognized at the State level as the Juaneño Band of Mission Indians, Acjachemen Nation.

The Juaneño inhabited the small area between the Gabrielino and Luiseño and states that Juaneño territory ran from Aliso Creek south along the coast to a point between San Onofre and Las Pulgas. Rather than having a distinct language, Juaneño speech was a dialect of Luiseño, and the dialectical differences between the Juaneño and Luiseño "did not prevent mutual understanding…" Juaneño and Gabrielino languages, however, were mutually unintelligible. Despite linguistic differences, though, it should be mentioned that the material culture and, in fact, most aspects of Gabrielino and Juaneño culture were nearly identical.

[3] Bean, Lowell John, and Charles R. Smith. 1978. Gabrielino. In R. Heizer ed., *Handbook of North American Indians*, Vol. 8, *California*, pp. 538–549. Smithsonian Institution, Washington, D.C.

Although local variations in culture between Juaneño and Luiseño may have existed, it was a village-level difference rather than a tribal-level difference, suggesting only minor differences between Juaneño and Luiseño. In addition, the Juaneño were a subgroup of the greater Luiseño tribe and may be a coastal branch of the Luiseño. Major linguistic similarities existed between the Luiseño and Juaneño groups, and language differences between the Juaneño and Luiseño were far fewer than between the Juaneño and Gabrielino.

4.4.2.4 Historic Background

Spanish Mission Period (1769–1821). The period from 1769–1821 is often referred to as the Spanish Mission Period. The period begins in 1769 with the Portolá expedition of 1769–1770 and ends in 1821, when Mexico gained independence from Spain.

From 1769–1823, 21 California missions were ultimately established in Alta California. Mission San Diego de Alcalá, the first and southernmost of the Alta California missions, was established on July 16, 1769. The fourth of the Alta California missions, and the first to be established in Gabrielino territory, was Mission San Gabriel Arcángel, founded on September 8, 1771, near the present-day city of Montebello. After having considered a location along the Santa Ana River, the Montebello site was chosen but was moved five miles closer to the mountains in 1776, where it has remained since.

Closer to the project site, the seventh mission founded in Alta California was Mission San Juan Capistrano, established on November 1, 1776, in Juaneño territory. Although it has the same name, this mission is not to be confused with the locality identified by Crespí, where Mission San Luis Rey was eventually founded. In 1778, Mission San Juan Capistrano was moved to its present location, only about 1.0 mile south of the project site, in order to take advantage of a more dependable water supply. While the location of the old mission is unknown, its name is not. The lands occupied by the old mission are now known as Mission Viejo. The San Juan Capistrano mission's land holdings were extensive in order to support itself and its Indian converts.

Mexican Rancho Period (1821–1848). In 1821, Mexico gained independence from Spain, and in 1848, the United States formally obtained California under the Treaty of Guadalupe Hidalgo. The period from 1821–1848 is hereafter referred to as the Mexican Rancho Period. During this period, large tracts of land termed ranchos were granted by the various Mexican Governors of Alta California, usually to individuals who had worked in the service of the Mexican government.

The project site is not within a Spanish Period Concession or Mexican Period Land Grant. It is in a tract of land surrounding Mission San Juan Capistrano, intended to be used by the mission for purposes such as grazing of cattle and livestock. The project site is just east of *Rancho Niguel*, which was a Mexican Rancho Period land grant of three square leagues (13,316 acres) made in 1842 by Governor Juan Bautista Alvarado to Juan and Concepcion Avila.

American Period (1848–Present). During the Mexican-American War, hostilities in California officially ended on January 13, 1847, when Don Pio Pico, the last Mexican Governor of California, and John C. Fremont, representing the United States, signed the Treaty of Cahuenga. On February 2, 1848, Mexico formally ceded California to the United States under the Treaty of Guadalupe Hidalgo.

This began the American Period. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849.

In the years immediately following the United States' acquisition of California, the cattle industry reached its greatest prosperity due to the massive influx of immigrants during the Gold Rush. Mexican Period land grants had created large pastoral estates in California, and a high demand for beef during the Gold Rush led to a cattle boom that lasted from 1849 to 1855. In 1855, however, the demand for California beef began to decline as a result of sheep imports from New Mexico, cattle imports from the Mississippi and Missouri Valleys, and the development of stock breeding farms. When the beef market collapsed, California ranchers were unprepared. Many had borrowed heavily during the boom, mortgaging their land at interest rates as high as 10 percent per month. The collapse of the cattle market meant that many of these ranchos were lost through foreclosure, while others were sold to pay debts and taxes.

Beginning in the 1800s and continuing to the present time, land development was also a major business. Towns were built in open areas, often in areas previously used for agricultural purposes. Commercial and residential development slowly supplanted farms following repeated cycles of boom and bust. Slowly the landscape of Southern California changed until today the coastal portion of the State appears almost as one large city.

San Juan Capistrano. Founded on November 1, 1776, San Juan Capistrano was named for St. John Capistran (1385–1456), the fighting priest who took part in the defense of Vienna against an attack by the Turks. Father Junipero Serra applied the name based on orders from the Viceroy of New Spain, Antonio Bucareli. When founded, Father Junipero Serra, who was then the President of the California Missions, applied the name *Quanis-Savit* to the mission when he opened the mission registers in November of 1776. However, the correct name should have been *Sajivit*. It is unknown what *Quanis-Savit* (*Sajivit*) means.

The original large adobe church of San Juan Capistrano was constructed from March 2, 1797, to September 8, 1806. On early American maps, the name San Juan Capistrano is usually shortened to San Juan. On a military map of 1847, it is humorously identified as "San Campistrano." A post office, "Capistrano," was established on June 5, 1867, and the name prevailed until October 23, 1905, when it was changed to "San Juan Capistrano".

4.4.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to cultural resources that are relevant to the proposed project.

4.4.3.1 Federal Policies and Regulations

National Historic Preservation Act of 1966. The National Historic Preservation Act (NHPA) of 1966 was enacted to preserve the nation's historic resources at a time when many were being destroyed by federal infrastructure projects and urban renewal programs undertaken in cities across the country. The NHPA created the Advisory Council on Historic Preservation, an independent federal agency, that advises the President and Congress on historic preservation matters; the National Register of Historic Places (National Register) to provide a federal inventory of the districts, sites,

buildings, structures, and objects significant on a national, State, or local level in American history, architecture, archaeology, engineering and culture; the Section 106 process, requiring federal agencies to evaluate the effects of their projects on historic resources; Section 110, requiring federal agencies to establish their own historic preservation policies; and the Historic Preservation Fund to assist states and individuals with paying for historic preservation efforts.[4]

National Register of Historic Places (National Register). The National Register was first established in 1966, with major revisions in 1976. Regulations enacting the NHPA that pertain to the National Register are promulgated at 36 Code of Federal Regulations (CFR) § 60 which describes the statewide survey and planning process for historic preservation, as well as establishes the responsibilities of State Historic Preservation Officers (SHPOs) and sets standards for SHPO staff and State review boards. Guidelines concerning the National Register are set forth at 36 CFR § 60.6. In addition, further regulations are found in 36 CFR §§ 63-66, -800, and *Bulletin 15: How to Apply the National Register Criteria for Evaluation* (Bulletin 15),[5] which define procedures for determination of eligibility for listing, identification of historic properties, recovery, reporting, and protection procedures. The National Register was established to recognize resources associated with the accomplishments of all peoples who have contributed to the country's history and heritage. Guidelines were designed for federal and State agencies in nominating cultural resources to the National Register. These guidelines are based upon integrity and significance of the resource. Integrity applies to specific items such as location, design, setting, materials, workmanship, feeling, and association. Quality of significance in American history, architecture, archaeology, engineering, and culture is present in resources that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet at least one of the following criteria:

- **Criterion A:** Associated with events that have made a significant contribution to broad patterns of our history
- **Criterion B:** Associated with the lives of persons significant in our past
- **Criterion C:** Embodies distinctive characteristics of type, period, or method of construction, or that represent the work of master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
- **Criterion D:** Have yielded, or are likely to yield, information important in prehistory or history

Bulletin 15 defines integrity as "…the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic or prehistoric period. If a property retains the physical characteristics it possessed in the past then it has the capacity to convey association with historical patterns or persons, architectural or engineering design and technology, or information about a culture or peoples." There are also seven aspects of integrity that

[4] National Park Service, National Historic Preservation Act of 1966 <https://www.nps.gov/subjects/archeology/national-historic-preservation-act.htm> (accessed January 16, 2026).

[5] United States Department of the Interior National Park Service (NPS). 1982. *Bulletin 15: How to Apply the National Register Criteria for Evaluation*.

are used: (1) location, (2) design, (3) setting, (4) materials, (5) workmanship, (6) feeling, and (7) association.

4.4.3.2 State Policies and Regulations

California Environmental Quality Act (CEQA). CEQA, (Pub. Res. Code §§ 21000 et seq.), applies to all discretionary projects undertaken or subject to approval by the State's public agencies (14 California Code of Regulations [CCR] § 15002(i)). Pursuant to the *State CEQA Guidelines*, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (14 CCR § 15064.5(b)).

State CEQA Guidelines Section 15064.5(a) defines a "historical resource" as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (as defined in Pub. Res. Code § 5024.1; 14 CCR § 4850, et seq.)
- Listed in a local register of historical resources (defined at Pub. Res. Code § 5020.1(k))
- Identified as significant in a historical resource survey meeting the requirements of Pub. Res. Code § 5024.1(g)
- Determined to be a historical resource by a project's lead agency (14 CCR § 15064.5(a))

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California…Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources" (14 CCR § 15064.5(a)(3)).

If an impact on a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (14 CCR § 15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project would have on the resource. Generally, a project that follows the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* shall be considered mitigated to a level of a less than significant impact on the historical resource (14 CCR § 15064.5(b)(3)). As stated in Section 15126.4(b)(2) of the *State CEQA Guidelines,* "In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment will occur." Finally, CEQA requires that all feasible mitigation be undertaken even if the mitigation does not reduce impacts to less than significant levels (14 CCR § 15126.4(a)(1)).

California Register of Historical Resources (California Register). Pub. Res. Code Section 5024.1 established the California Register. The requirements for listing in the California Register, including the criteria for listing and having integrity, are similar to those of the National Register. Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register (14 CCR § 15064.5(a)(3)). For a cultural resource to qualify for listing in the California Register, it must be significant under one or more of the following criteria:

- **Criterion 1:** Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- **Criterion 2:** Associated with the lives of persons important in our past
- **Criterion 3:** Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- **Criterion 4:** Has yielded, or may be likely to yield, information important in prehistory or history

In addition to being significant under one or more of these criteria, a resource must retain enough of its historic character and appearance to be recognizable as a historical resource and be able to convey the reasons for its significance (14 CCR § 4852(c)). Generally, a cultural resource must be 50 years or older to be eligible for the California Register (14 CCR § 4852(d)(2)).

In addition to meeting one or more of the significance criteria, a cultural resource must retain its historical integrity to be considered eligible for listing in the California Register. Historical integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance."[6] The evaluation of integrity must be grounded in an understanding of a resource's physical features and its environment, and how these relate to its significance. There are seven aspects of integrity to consider when evaluating a cultural resource (i.e., location, design, setting, materials, workmanship, feeling, and association), which are described as follows:[7]

1. ***Location*** is the place where the historic property was constructed or the place where the historic event occurred. The actual location of a historic property, complemented by its setting, is particularly important in recapturing the sense of historic events and persons.

[6] California Office of Historic Preservation. n.d. California Office of Historic Preservation Technical Assistance Series #6. *California Register and National Register: A Comparison.* California Office of Historic Preservation. California Office of Historic Preservation, Sacramento.

[7] United States Department of the Interior National Park Service (NPS). 1997. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*. U.S. Department of the Interior, Washington, D.C.

2. ***Design*** is the combination of elements that create the form, plan, space, structure, and style of a property. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials.

3. ***Setting*** is the physical environment of a historic property. Setting refers to the character of the place in which the property played its historical role. Physical features that constitute the setting of a historic property can be either natural or manmade, including topographic features, vegetation, paths or fences, or relationships between buildings and other features or open space.

4. ***Materials*** are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

5. ***Workmanship*** is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of the artisan's labor and skill in constructing or altering a building, structure, object, or site.

6. ***Feeling*** is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character.

7. ***Association*** is the direct link between an important historic event or person and an historic property.

California PRC § 5097.98. Section 5097.98 of the PRC states that the Native American Heritage Commission (NAHC), upon notification of the discovery of Native American human remains pursuant to Health & Safety Code Section 7050.5 (discussed below), shall immediately notify those persons (i.e., the Most Likely Descendant or "MLD") it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

California Health and Safety Code § 7050.5. Section 7050.5 of the California Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify a Native American MLD to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

4.4.3.3 Regional Policies and Regulations

There are no regional policies or regulations applicable to the proposed project.

4.4.3.4 Local Policies and Regulations

City of San Juan Capistrano General Plan. The Cultural Resources, Conservation and Open Space, and Community Design Elements of the City's General Plan contain the following goals and implementing policies related to cultural and historical resources that would be applicable to the proposed project:

- **Cultural Resources Goal 1:** Preserve and protect historical, archaeological, and paleontological resources.
    - **Policy 1.1:** Balance the benefits of development with the projects' potential impacts to existing cultural resources.
    - **Policy 1.2:** Identify, designate, and protect buildings and sites of historic importance.
- **Conservation and Open Space Goal 4:** Prevent incompatible development in areas which should be preserved for scenic, historic, conservation, or public safety purposes.
    - **Policy 4.1:** Assure incompatible development is avoided in those areas which are designated to be preserved for scenic, historic, conservation, or public safety purposes.
- **Conservation and Open Space Goal 5:** Shape and guide development in order to achieve efficient growth and maintain community scale and identity.
    - **Policy 5.2:** Ensure that new development integrates and preserves areas designated for scenic, historic, conservation, or public safety reasons.
- **Community Design Goal 2: Preserve the historic character of the community.**
    - **Policy 2.1:** Encourage development which complements the City's traditional, historic character through site design, architecture, and landscaping.

City of San Juan Capistrano Inventory of Historic and Cultural Landmarks. The City's Inventory of Historic and Cultural Landmarks (IHCL) designates that a property or building has historic, cultural, or architectural significance. The inventory identifies properties or buildings which may require protection, enhancement, or perpetuation, and protected use of those areas, structures and objects which, due to their historical or cultural significance or character, require special consideration in order to meet the goals and policies of the General Plan with regard to preservation of cultural resources. The City Council adopts the IHCL, and amends as needed, based on a property owner's request, a Report to Determine Historic, Cultural or Architectural Significance of the property or building being requested to be added to the IHCL, and a recommendation from the City's Cultural Heritage Commission. Properties or buildings on the IHCL are subject to further review in accordance with the City's Municipal Code (noted below).

City of San Juan Capistrano Municipal Code. Building and construction in the city are subject to the regulations of the City's Municipal Code. The following provisions of the City's Municipal Code are related to cultural and historical resources:

- **Article 3, Development Review Procedures, § 9-2.327, Historical and Cultural Landmark Site Plan Review:** Section 9-2.327 of the City's Municipal Code provides for the protection, enhancement, perpetuation, and use of those areas, structures and objects within the City which, due to their historical or cultural significance or character, require special consideration in order to meet the goals and policies of the General Plan with regard to preservation of cultural resources.

City of San Juan Capistrano City Council Policy 601. On March 18, 1997, the San Juan Capistrano City Council adopted Policy 601 guiding management of historic, archaeological, and paleontological resources in the City. The intent and purpose of Policy 601 is to establish specific procedures and policies to ensure that significant historic resources, either known or discovered during construction, will be preserved as a community resource in the most financially equitable method possible. This includes establishing administrative procedures for site surveys, review procedures to evaluate resource reports, procedures to ensure proper mitigation and monitoring, and to properly record resources with the City and the proper research institution.

4.4.4 Methodology

To assess the potential impacts of the proposed project on cultural resources, a Cultural Resources Assessment (CRA) was prepared by LSA in January 2026. The CRA is included with this Draft EIR as **Appendix F**. These reports included a record and literature search conducted at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton (CSUF) on September 3, 2025, a search of the NAHC Sacred Lands File (SLF) on July 2, 2025, Native American consultation, and an intensive-level field survey of the project site on October 22 and November 6, 2025.

4.4.4.1 Records Searches

South Central Coastal Information Center. On September 3, 2025, a record and literature search was conducted at the SCCIC at CSUF. The record search results indicate that a total of 15 prior cultural resource studies include at least a portion of the project site. These studies are listed in **Table 4.4.A: Records Search Results**.

Table 4.4.A: Records Search Results

Reference	OR No.[1]	Type of Study
Previous Studies in the Project Site		
Drover (n.d.)	536	General Plan Element
Schroth and Cameron (1983)	653	Survey
Sorensen (1990)	1011	Record Search
Bissell and McKenna (1992)	1237	Survey
Landis and Cerreto (1994)	1399	Burial Report
Bonner and Hocking (1994)	1869	Monitoring
Shepard (2002)	2427	Survey
Hale and Schmidt (2000)	3152	Monitoring
Price and Price (2007)	3390	Survey
Granger (2009a)	3575	Monitoring
Lichtenstein et al. (2009)	3765	Survey
McKenna (2010)	3810	Survey
Demcak (2009)	3830	Monitoring
Granger (2009b)	3850	Monitoring
Mason (2010)	3873	Survey
Previous Studies within 0.5-mile of the Project Site		
OR-263, -298, -324, -325, -382, -464, -523, -524, -604, -720, -723, -782, -838, -886, -887, -905, -987, -1104, -1133, -1140, -1215, -1275, -1350, -1351, -1397, -1483, -1602, -1603, -1631, -1688, -1717, -1845, -2021, -2078, -2290, -2426, -2435, -2634, -3162, -3163, -3373, -3414, -3506, -3573, -4415, -4588,		

Source: *Archaeological Survey of the 65.5-Acre Legacy Ranch Project, 30093 Camino Capistrano, San Juan Capistrano, Orange County, California* (LSA, January 2026).

[1] OR is the Information Center code for Orange County, the county in which the study occurred.

The 15 prior studies that include part of the project site consist of seven surveys, five monitoring reports, one record search, one burial report, and one Cultural Element of a General Plan report. They show that the project site was surveyed in its entirety twice, was part of the Cultural Resource Element of a General Plan during which it may have been surveyed, and was also part of five other surveys that covered an additional 20 percent of the project site.

The record search also recorded an additional 46 cultural resource studies within 0.5 mile of the project site. These studies include 26 surveys, 11 monitoring reports, five excavation studies, three record searches, and one research study.

The record search also records a total of 25 resources within the project site and nearby. Four resources are recorded within the project site and another 21 resources outside but within 0.5 mile of the project site. Nine of the 21 resources outside of the project site are relatively close, while the remaining 12 are more distant (approaching 0.5 mile from the project site). These resources are described in general by type relative to their distance from the project site.

As discussed above, prior cultural resource work has resulted in the recording of four cultural resources within the project site. These resources include three historic resources and one prehistoric resource. The three historic resources are all residential complexes, while the prehistoric

resource is a large habitation site with numerous loci occupying primarily the western side of the project site near the railroad track, which forms the west side of the project site.

- **P-30-1328H (CA-ORA-1328H).** This resource is a residential complex located at 29931 Camino Capistrano consisting of a house known as the Charles Williams residence, garage, barn, outbuildings, buried septic system, and pits (possibly privies) and trash areas. A construction date is not provided for the residence.

- **P-30-1329H (CA-ORA-1329H).** This resource is the Swanner House. It is a residential complex located at 30291 Camino Capistrano consisting of a single-story farmhouse built in 1918, a barn, a well head, a septic system, garden areas, and possible privy areas.

- **P-30-1330H (CA-ORA-1330H).** This resource is also the Williams/Swanner Residence, locally called the Swanner House. It is a residential complex located at 29991 Camino Capistrano consisting of a house, garage, milk house/water tower, barn, well head, septic system, garden areas and possible privies and trash dump areas. A construction date is not provided for the residence.

- **P-30-1338 (CA-ORA-1338).** This resource is a large, multi-locus prehistoric habitation site first recorded in 1983 as five distinct sites (CA-ORA-1035, CA-ORA-1036, CA-ORA-1037, CA-ORA-1038, and CA-ORA-1039), each site recorded as a possible camp with a multitude of stone tools and several species of marine shell. The sites were recorded in the north, central-western, and southeastern sides of the current CA-ORA-1338 site boundary that encompasses all of them.

Sacred Lands File Search. Native American consultation for this project was initiated on July 2, 2025, with a request to the NAHC for a search of the SLF. The NAHC maintains the SLF, which provides information on the location of tribal cultural resources in or near a specified area.

On July 17, 2025, the NAHC responded stating that the result of the SLF search was positive, meaning that tribal cultural resource(s) are known to occur in or near the project site. The email response from the NAHC was also sent to Joyce Perry, Tribal Manager of the Juaneño Band of Mission Indians, Acjachemen Nation – Belardes. As part of the results of the SLF search, the NAHC also provided a list of Native American contacts for the project.

4.4.4.2 Fieldwork

On October 22 and November 6, 2025, a pedestrian survey of the project site was conducted by LSA archaeologist Ivan Strudwick. Beginning in the north-central portion of the project site, the Dr. Joe Cortese Dog Park and associated concrete paths and adjacent roadway were traversed. Much of the dog park is an excavated basin, with the access roads covered with gravel and exhibiting no natural ground visibility. The area of the replica Native American village (Putuidem Village) just west of the dog park was also surveyed, but the replica village has a layer of decomposing granitic (DG) rock that obscures the natural ground surface over the entire “village” and over the surrounding trails. The parking lot south of the dog park is also covered with gravel and exhibits no natural ground visibility.

The survey continued to the vicinity of an old pumphouse/tool shed on the northwest side of the gravel parking lot. Beginning at the shed, the survey was conducted by walking transects west into the open field toward the railroad tracks and then moving southward and walking east back to the west edge of the parking lot. The transects were spaced approximately 7-10 meters apart and continued southward, becoming longer and longer as the parking lot receded. South of the parking lot, the transects continued eastward to the riparian edge of Trabuco Creek, which was densely riparian and almost impenetrable except along narrow existing trails.

The open field contains a few remnant orange trees that are withered and in need of water. A few scattered, large oak trees also grow in the field. Ground visibility in the southern portion of the open field was generally good, mainly 90 percent or more. The reason for the excellent ground visibility is that the area was recently disced to reduce vegetation. The survey continued until the southern end of the project site was completely surveyed. Only a few scattered fragments of cultural material consisting of marine shell were found. No other material was observed.

Sediment in the open southern portion of the project site is a brown silt loam with some small rocks and gravel. The southernmost portion of the project site along the north side of Arroyo Trabuco appears to be a terrace adjacent a few feet above the drainage and 10–15 or more feet lower than the main portion of the project site to the north. This terrace is likely the result of drainage inundation and erosion during flood episodes. Sediment in this terraced area is also a light brown silt-loam but contains abundant rocks and gravel, much more rock and gravel than elsewhere in the project site.

Once the southern portion of the project site was surveyed, the open field in the northern portion of the project site west of the Putuidem Village and P-30-1330H (the Williams/Swanner House) was surveyed. The survey followed east-west transects separated by 7–10 meters beginning in the open field just west of the Putuidem Village. The area surveyed was unfenced with no questionable access. Fenced areas were surveyed on November 6, 2025.

The northern edge of the field was disced, but the central area where the densest and most abundant prehistoric material has been recorded in the past was left undisced and exhibited a growth of weeds and brush two to three feet tall with little or no ground visibility. No cultural material was observed. The only ground visibility in this north-central portion of the field was along the west edge nearest the rail line, and along the west edge nearest the Putuidem Village and parking lot. A few orange trees and some tall native brush grow in the northern field but there are no large oak trees in this portion of the project site. Sediment in the northern area is also a light brown silt-loam with some rocks and gravel. Only a few scattered fragments of unidentified marine shell were found. No other material was observed.

The survey completed on November 6, 2025 began with the Williams/Swanner residential complex (CA-ORA-1330H). The fenced area just north of the open field in the north portion of the project site is being used for agricultural purposes to grow organic produce for a local restaurant. The agricultural use has resulted in tilled soil that provided 100 percent ground visibility, and no cultural material was observed. The Williams/Swanner residential complex (CA-ORA-1330H) contained a couple of old shed/outbuildings and a pile of old wagon and farm equipment pieces that appear to be at least 100 years old. Although CA-ORA-1328H (Charles Williams residential complex) is depicted

as within the project site, the north boundary of the project site ends at the south boundary of CA-ORA-1328H. Ground visibility in the very northern portion of the project site varied from zero to over 70 percent in open areas. No prehistoric material was observed in this area.

Following the Williams/Swanner residential complex, a survey was conducted along Trabuco Creek near CA-ORA-1329H (the Swanner House). This area was surveyed intensively due to dense trees, and piles of construction material stored at the site by the City, which made linear transects difficult to walk. A remnant of the original orange orchard that remains in good health still exists in that area. Ground visibility in this area also varied from zero to more than 70 percent depending on debris and vegetative ground cover. Sediment there was a grey-brown clay loam with some rocks and gravel. The increased clay level may have resulted from the proximity to Arroyo Trabuco. No prehistoric material was observed in this area. The results of this survey within the previously identified SC-ORA-1338 site boundary has been included in a site update provided in Appendix B of the CRA (see **Appendix F**).

4.4.5 Thresholds of Significance

The thresholds for impacts on cultural resources used in this analysis are derived from Appendix G of the *State CEQA Guidelines*. The proposed project may be deemed to have a significant impact with respect to cultural resources if it would:

Threshold 4.4.1: Cause a substantial adverse change in the significance of a historical resource as defined in *State CEQA Guidelines* Section 15064.5;

Threshold 4.4.2: Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5; or

Threshold 4.4.3: Disturb any human remains, including those interred outside of formal cemeteries.

For the proposed project to have "a substantial adverse change" in the significance of a historical resource, it would have to demolish, destroy, relocate, or alter the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (*State CEQA Guidelines* § 15064.5(b)). Archaeological sites may qualify as historical resources under CEQA (*State CEQA Guidelines* § 15064.5(c)(1)).

Generally, for purposes of CEQA, the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register or an officially recognized local register of historical resources, or its identification in a historical resources survey meeting the requirements of PRC § 5024.1(g).

4.4.6 Project Impacts

The following section discusses the potential impacts to cultural resources associated with implementation of the proposed project according to the significance criteria described above.

As defined in the *State CEQA Guidelines*, "historical resources" can include both significant built-environment resources and archaeological sites. *State CEQA Guidelines* Section 15064.5(a)(3) defines a "historical resource" as any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. *State CEQA Guidelines* Section 15064.5(c) states that if an archaeological site does not meet the criteria defined in *State CEQA Guidelines* Section 15064.5(a), the resource may still meet the definition of a "unique archaeological resource" described in PRC Section 21083.2. Potential impacts to these two types of historical resources are discussed under the separate threshold discussions below.

Threshold 4.4.1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in *State CEQA Guidelines* Section 15064.5?

Less Than Significant Impact Discussion of Effects: Pursuant to CCR Section 15064.5, the term "historical resources" shall include:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources [California Register] (Pub. Res. Code § 5024.1, Title 14 California Code of Regulations [CCR], § 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852) including the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

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

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

D. Has yielded, or may be likely to yield, information important in prehistory or history.

A "substantial adverse change" to a historical resource, according to Section 5020.1(q) of the Public Resources Code (PRC), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

The project site is currently developed with the historic Swanner House, which was listed on the National Register and local IHCL in January 2007 for its association with the development of citrus and walnut agriculture in San Juan Capistrano and as an excellent example of Craftsman-style architecture. In addition, as discussed above, the cultural resources records search identified three historic resources (P-30-1328H (CA-ORA-1328H), P-30-1329H (CA-ORA-1329H), and P-30-1330H (CA-ORA-1330H), all associated with the Swanner House and property which is listed on the National Register for its association with the development of citrus and walnut agriculture in San Juan Capistrano and as an excellent example of Craftsman-style architecture. While no specific information on P-30-1328H is available in the Built Environment Resource Directory (BERD) for Orange County, P-30-1330H is listed as 1D. The 1D listing means the resources is a "contributor to a district or multiple resource property listed in National Register and California Register by the Keeper." This means that this resource is a part of the Swanner House.

The barn currently located within the proposed Community Building Core that would be demolished to make way for the proposed Community Building, is included on P-30-1329H. The record indicates that the barn was one of several buildings documented as a compound and included a main house, another barn, a bunk house and several other out buildings. The barn is the last remaining structure from the recorded complex as the other structures have been removed over the last several years. Accordingly, the barn lacks historical context that would yield information important to prehistory or history. Furthermore, the barn structure is in a state of disrepair, is of a utilitarian design that does not feature historically or aesthetically distinctive characteristics, and is not associated with historically or culturally significant people or events. Therefore, the barn would not qualify as a historic resources and would not meet the criteria for inclusion on either the National or California Register.

The proposed project includes the preservation of the existing uses on the project site, including the Swanner House, and does not include any alterations to the Swanner House or property. Therefore, implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in *State CEQA Guidelines* Section 15064.5 by directly impacting a historical resource through demolition or alteration.

However, construction of the proposed project would include the use of construction equipment, such as large bulldozers and loaded trucks, that would generate ground-borne vibration and could result in vibration-related effects on the Swanner House. The greatest vibration levels are anticipated to occur during the demolition, site preparation, and grading phase. All other phases are expected to

result in lower vibration levels. Section 4.10, Noise, includes a discussion of potential construction vibration damage, including potential construction vibration damage to the Swanner House. As shown in **Table 4.10.R: Potential Construction Vibration Damage**, in Section 4.10, the Swanner House would experience a vibration level of up to 0.034 PPV-Max (in/sec). The Caltrans vibration damage threshold that applies to older structures is 0.30 PPV (in/sec). Accordingly, this vibration level would not have the potential to result in building damage and construction vibration impacts on the Swanner House would be less than significant. Therefore, construction of the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in *State CEQA Guidelines* Section 15064.5 through indirect construction impacts. Overall, impacts on historical resources would be **less than significant**, and no mitigation is required,

Threshold 4.4.2: Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: The project site is currently developed with the Putuidem Village, a partial reproduction of a local Native American village. Putuidem Village is listed on the NAHC's SLF and has been determined eligible for listing in the National Register as a Traditional Cultural Property (TCP) due to its significance in the historic and ongoing cultural practices of the Acjachemen people, including ceremonies, storytelling, and communal gatherings, and its direct association with living tribal groups. TCPs are places "associated with cultural practices or beliefs of a living community" that are integral to their identity and rooted in history.[8] In addition, as discussed above, the cultural resources records search identified one prehistoric resource (P-30-1338 (CA-ORA-1338)), consisting of a large, multi-locus prehistoric habitation site first recorded in 1983 as 5 distinct sites (CA-ORA-1035, CA-ORA-1036, CA-ORA-1037, CA-ORA-1038, and CA-ORA-1039), each site recorded as a possible camp with a multitude of stone tools and several species of marine shell.

The proposed project includes the preservation of the existing uses on the project site, including the Putuidem Village, and does not include any alterations to the reproduction of a local Native American village. As no other cultural resources were identified within the areas of the project site that would be developed, implementation of the proposed project would not cause a substantial adverse change in the significance of a known, unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5. However, implementation of the proposed project would include ground disturbing activities including grading and excavation, which has the potential to unearth previously unknown archaeological deposits or resources, resulting in a potential substantial adverse change in the significance of a unique archaeological resource, as defined in *State CEQA Guidelines* Section 15064.5.

However, construction of the proposed project would be required to adhere to **Mitigation Measure CUL-1**, which requires monitoring by both a qualified archaeologist and a Native American monitor and includes procedures for recovering any significant or unique archaeological resource and for

[8] California Cultural Resources Preservation Alliance Inc. n.d. Putiidhem. <https://ccrpa.net/ putiidhem> (accessed June 2025).

preparation of a report that documents any cultural resource recovery at the project site, consistent with CCR Section 15064.5(e), Health & Safety Code Section 7050.5, and City Council Policy 601.

Mitigation Measure CUL-1

Cultural Resources Monitoring and Accidental Discovery. Prior to the issuance of grading permits, and consistent with City Council Policy 601, the project Applicant shall retain, with approval of the City of San Juan Capistrano (City) Development Services Director, or designee, a qualified archaeological monitor. A monitoring plan shall be prepared by the archaeologist and implemented upon approval by the City. Prior to issuance of grading permits, the project Applicant, with City approval, shall also retain a Native American monitor. Both monitors shall be present on the project site during ground-disturbing activities to monitor rough and finish grading, excavation, and other ground-disturbing activities in the native soils. Because no cultural resources were within the areas of the project site that would be developed, both monitors are not required to be present on a full-time basis, but shall spot check ground-disturbing activities to ensure that no cultural resources are impacted during construction activities.

If cultural materials are discovered during site preparation, grading, or excavation, the construction contractor shall divert all earthmoving activity within and around the immediate discovery area (i.e. 25 feet from the find) until a qualified archaeologist can assess the nature and significance of the find. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. To the extent feasible, project activities shall avoid these deposits (i.e., protect in place). Where avoidance is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing on the California Register of Historical Resources. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation can include, but is not necessarily limited to: excavation of the deposit in accordance with a data recovery plan (see California

Code of Regulations [CCR] Title 4(3) Section 5126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; production of a report detailing the methods, findings, and significance of the archaeological site and associated materials; curation of archaeological materials at an appropriate facility for future research and/or display; an interpretive display of recovered archaeological materials at a local school, museum, or library; and public lectures at local schools and/or historical societies on the findings and significance of the site and recovered archaeological materials. The City Development Services Director, or designee, shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.

Implementation of **Mitigation Measure CUL-1** would ensure that: (1) if archaeological cultural resources are identified during excavation, they would be evaluated, documented, and studied in accordance with standard archaeological practice, and (2) archaeological deposits would be treated in a culturally appropriate manner and in accordance with appropriate State codes and regulations.

In addition, as discussed in Section 4.12, Tribal Cultural Resources, the proposed project would be required to implement **Mitigation Measures TCR-1** and **TCR-2**, which require Native American monitoring of all grading and trenching activities and the identification of a centralized repatriation and reburial area within the project site. These measures are included at the request of the Juaneño Band of Mission Indians Acjachemen Nation-Belardes and would ensure that the proposed project would not result in significant impacts on tribal cultural resources.

Therefore, with implementation of **Mitigation Measure CUL-1** and **Mitigation Measures TCR-1** and **TCR-2,** implementation of the proposed project would not cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5, and impacts would be **less than significant with mitigation incorporated**.

Threshold 4.4.3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: There are no known human remains on the project site. However, as previously discussed, construction of the proposed project would include ground disturbing activities including grading and excavation. Ground-disturbing activity associated with project implementation has the potential to disturb previously unknown human remains.

In the event that human remains are identified during future ground-disturbing activities, these remains would be treated in accordance with Section 7050.5 of the Health and Safety Code and PRC Section 5097.98, as detailed in **Regulatory Compliance Measure CUL-1**. Section 7050.5 of the Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance within 50 feet of the find or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the Coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify an MLD to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Regulatory Compliance Measure CUL-1

Human Remains. In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). 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 PRC Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City of San Juan Capistrano shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of San Juan Capistrano shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.

PRC Section 5097.98 states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons it believes to be descended from the deceased (i.e., the Most Likely Descendant or "MLD"). With permission from the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

Construction of the proposed project would be required to comply with the appropriate procedures required under State law for the treatment of human remains, as detailed in **Regulatory Compliance Measure CUL-1.** In addition, construction of the proposed project would also be required to implement **Mitigation Measure CUL-1** and **Mitigation Measures TCR-1** and **TCR-2**, which would further reduce impacts on unknown human remains due to on-site monitoring by both a qualified archaeologist and a Native American monitor during excavation activities and the repatriation and reburial of tribal cultural resources, which can include human remains. Therefore, impacts related to human remains would be **less than significant with mitigation incorporated**.

4.4.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for cultural resources. The cumulative impact area for cultural resources related to the proposed project is the City of San Juan Capistrano and includes the projects provided in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures.

As discussed above, although there are built historic and archaeological resources present on the project site, including the Swanner House and archaeological resources associated with the Putuidem Village, the proposed project does not include any improvements or alterations to these areas. Instead, the proposed project includes the preservation of these existing uses on the project site. As no other known cultural resources were identified within the areas of the project site that would be developed, implementation of the proposed project would not cause a substantial adverse change in the significance of a known cultural resource. In addition, the proposed project would be required to adhere to **Regulatory Compliance Measure CUL-1,** which would ensure human remains would be treated in a culturally appropriate manner and in accordance with appropriate State codes and regulations. The proposed project would also be required to implement **Mitigation Measure CUL-1**, which would ensure that if unknown archaeological cultural resources are identified during excavation, these would be evaluated, documented, and studied in accordance with standard archaeological practice and archaeological deposits, and **Mitigation Measures TCR-1** and **TCR-2**, as discussed in Section 4.12, Tribal Cultural Resources, which require Native American monitoring of all grading and trenching activities and the identification of a centralized repatriation and reburial area within the project site. Adherence to these measures would ensure that implementation of the proposed project would not cause a substantial adverse change in the significance of a previously unknown or undocumented cultural resource. These measures would also reduce the potential of

the proposed project to contribute to a cumulatively considerable impact on cultural resources to a less than significant level.

In addition, each discretionary development proposal received by the City, including the past, present, and future projects listing in **Table 4.A**, would be required to comply with the requirements of CEQA, including an environmental review as applicable, to determine if the project would have a substantial adverse change in the significance of a cultural resource. Further, if the project is determined to have a potentially significant impact related to cultural resources, regulatory compliance measures (similar to **Regulatory Compliance Measure CUL-1**), adherence to State and local regulations and policies (including City Council Policy 601), and mitigation measures would be identified and prescribed in order to reduce any potentially significant impacts to cultural resources. Therefore, when considered in conjunction with past, present, and probable future projects, the cumulative impact on cultural resources from implementation of the proposed project and the cumulative projects would be **less than cumulatively considerable.**

4.4.8 Level of Significance Prior to Mitigation

There would be no potentially significant impacts related to cultural resources with implementation of the proposed project.

4.4.9 Regulatory Compliance Measures and Mitigation Measures

4.4.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are applicable to the proposed project.

Regulatory Compliance Measure CUL-1

Human Remains. In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). 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 PRC Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials. Consistent with CCR

Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City of San Juan Capistrano shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of San Juan Capistrano shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.

4.4.9.2 Mitigation Measures

The proposed project would be required to implement the following mitigation measures.

Mitigation Measure CUL-1

Cultural Resources Monitoring and Accidental Discovery. Prior to the issuance of grading permits, and consistent with City Council Policy 601, the project Applicant shall retain, with approval of the City of San Juan Capistrano (City) Development Services Director, or designee, a qualified archaeological monitor. A monitoring plan shall be prepared by the archaeologist and implemented upon approval by the City. Prior to issuance of grading permits, the project Applicant, with City approval, shall also retain a Native American monitor. Both monitors shall be present on the project site during ground-disturbing activities to monitor rough and finish grading, excavation, and other ground-disturbing activities in the native soils. Because no cultural resources were identified on the project site, both monitors are not required to be present on a full-time basis, but shall spot check ground-disturbing activities to ensure that no cultural resources are impacted during construction activities.

If cultural materials are discovered during site preparation, grading, or excavation, the construction contractor shall divert all earthmoving activity within and around the immediate discovery area (i.e. 25 feet from the find) until a qualified archaeologist can assess the nature and significance of the find. Project personnel shall not collect or move any archaeological materials or human

remains and associated materials. To the extent feasible, project activities shall avoid these deposits (i.e., protect in place). Where avoidance is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing on the California Register of Historical Resources. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation can include, but is not necessarily limited to: excavation of the deposit in accordance with a data recovery plan (see California Code of Regulations [CCR] Title 4(3) Section 5126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; production of a report detailing the methods, findings, and significance of the archaeological site and associated materials; curation of archaeological materials at an appropriate facility for future research and/or display; an interpretive display of recovered archaeological materials at a local school, museum, or library; and public lectures at local schools and/or historical societies on the findings and significance of the site and recovered archaeological materials. The City Development Services Director, or designee, shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.

Mitigation Measure TCR-1	**Native American Monitoring of Ground Disturbing Activities.** (Refer to Section 4.12, Tribal Cultural Resources.)
Mitigation Measure TCR-2	**Repatriation and Reburial of Tribal Cultural Resources.** (Refer to Section 4.12, Tribal Cultural Resources.)

4.4.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to cultural resources with implementation of **Mitigation Measures CUL-1, TCR-1** and **TCR-2**.

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4.5 ENERGY

This section describes energy use resulting from implementation of the proposed Legacy Ranch Project (proposed project) and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency. The energy use analysis in this section is based on information from the California Emissions Estimator Model (CalEEMod) version 2022.1 modeling results contained in **Appendix C**.

4.5.1 Scoping Process

The City of San Juan Capistrano (City) received no comments during the scoping period for this Draft EIR (November 13 through December 15, 2025) concerning the proposed project's potential impacts related to energy. In addition, no comments pertaining to energy were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** to this Draft EIR.

4.5.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, Orange County. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, multi-family residential (The Groves Apartments, (a senior living apartment community) to the south, and an Orange County Transportation Authority-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route.

4.5.2.1 Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2024, California's electricity was generated primarily by natural gas (40.0 percent) and renewable sources (59.8 percent), including large hydroelectric (11.7 percent) and nuclear (8.5 percent). Coal and other unspecified sources were less than 1 percent of the total electricity generated.[1] Total electric generation in California in 2024 was 216,181 GWh, similar to the 2023 total generation of 215,623 GWh.[2]

[1] California Energy Commission (CEC). 2024. *2024 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2024-total-system-electric-generation (accessed February 2026).

[2] California Energy Commission (CEC). 2024. *2024 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2024-total-system-electric-generation (accessed February 2026).

The project site is within the service territory of San Diego Gas & Electric (SDG&E). SCE provides electricity to more than 3.7 million people in a 4,100 square mile service area spanning Orange and San Diego Counties.[3] According to the California Energy Commission (CEC), total electricity consumption in the SDG&E service area in 2024 was 16,786 GWh. Total electricity consumption in Orange County in 2024 was 19,225 GWh (19,225,000,000 kilowatt-hours [kWh]).[4]

4.5.2.2 Natural Gas

Natural gas is a nonrenewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[5]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000-square-mile service area throughout Central and Southern California, from Visalia to the Mexican border.[6] According to the CEC, total natural gas consumption in the SoCalGas service area in 2024 was 4,959 million therms.[7] Total natural gas consumption in Orange County in 2024 was 561.7 million therms.[8]

4.5.2.3 Petroleum/Transportation Energy

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

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3 San Diego Gas & Electric (SDG&E). n.d. About Us. Website: https://www.sdge.com/more-information/our-company/about-us (accessed February 2026).

4 California Energy Commission (CEC). 2025a. California Electricity Consumption Dashboard. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0 (accessed February 2026).

5 California Energy Commission (CEC). 2021. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed February 2026).

6 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www.socalgas.com/about-us (accessed February 2026).

7 California Energy Commission (CEC). 2025b. Natural Gas Consumption Dashboard. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1 (accessed February 2026).

8 Ibid.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, in 2021, total gasoline consumption in California was 289,918 thousand barrels (12.2 billion gallons) or 1,464.7 trillion British Thermal Units (BTU).[9] Of the total gasoline consumption, 273,289 thousand barrels (11.5 billion gallons) or 1,380.7 trillion BTU were consumed for transportation.[10] Diesel fuel is the second largest transportation fuel used in California, representing 17 percent of total fuel sales behind gasoline. In 2024, 3.5 billion gallons of diesel (including offroad diesel) was sold in California.[11]Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 1.2 billion gallons of gasoline and approximately 157.8 million gallons of diesel will be consumed from vehicle trips in Orange County in 2026.

4.5.3 Regulatory Setting

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. On the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs State response to energy emergencies.

The following describes the federal, State, and local regulations and policies related to energy that are relevant to the proposed project.

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9 United States Energy Information Administration (EIA). 2022. California State Profile and Energy Estimates, Data. Website: www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html &sid=CA (accessed February 2026).

10 Ibid.

11 California Energy Commission (CEC). n.d. Diesel Fuel Data, Facts, and Statistics. Website: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics (accessed January 2026).

4.5.3.1 Federal Policies and Regulations

Energy Policy Act of 2005. The Energy Policy Act of 2005 (42 United States Code, Section 13201 *et seq*.) seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under this legislation, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy Standards. On March 31, 2022, the National Highway Traffic Safety Administration finalized the CAFE standards for model years 2024–2026 passenger cars and light trucks. The amended CAFE standards would require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050. Heavy-duty pickup truck and van fuel efficiency will increase 10 percent per year for model years 2030–2032 and 8 percent per year for model years 2033–2035.

4.5.3.2 State Regulations

Executive Order B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Executive Order B-48-18. In January 2018, Governor Brown signed EO B-48-18 requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential land uses, through the LCFS Program, and recommend how to ensure affordability and accessibility for all drivers.

Executive Order N-79-20. EO N-79-20, which was signed by the Governor on September 23, 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks shall be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be

zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and 100 percent of off-road vehicles and equipment in the State shall be zero-emission by 2035, where feasible.

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs, license power plants of 50 megawatts (MW) or larger, develop energy technologies and renewable energy resources, plan for and direct State responses to energy emergencies, and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting. In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2024 Integrated Energy Policy Report Update.*[12] The *Integrated Energy Policy Report Update* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on State electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

[12] California Energy Commission (CEC). 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances Assembly Bill (AB) 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission for the private utilities and by the California Energy Commission for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Renewable Portfolio Standard.SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[13]

Assembly Bill 1279. AB 1279 was signed in September 2022 and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant State agencies to achieve these goals.

California Energy Code. Energy consumption by buildings in California is regulated by the Building Energy Efficiency Standards, Part 6 of Title 24 of the California Code of Regulations, known as the Energy Code. The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The Energy Code is updated every 3 years, with the most recent update consisting of the 2025 Energy Code, which became effective January 1, 2026. The efficiency standards apply to new construction as well as to rehabilitation of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in the Energy Code and California Green Building Standards Code.

[13] California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed February 2026).

California Green Building Standards Code. In 2010, the California Building Standards Commission adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2025 CALGreen Code standards that became effective January 1, 2026. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce greenhouse gas (GHG) emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

Appliance Efficiency Regulations. Appliance Efficiency Regulations set minimum energy and water performance standards for products like refrigerators, lighting, and air conditioners, driven by the CEC (Title 20), complementing federal rules, to promote efficiency and reduce energy use.

California Energy Efficiency Strategic Plan. On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that the CPUC established in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- Heating, ventilation, and air conditioning will be transformed to ensure that its energy performance is optimal for California's climate.

4.5.3.3 Regional Regulations

There are no regional regulations that are applicable to the proposed project.

4.5.3.4 Location Regulations

City of San Juan Capistrano General Plan. The Environmental Justice and Conservation and Open Space, and Community Design Elements of the City's General Plan contain the following goals and policies from the City of San Juan Capistrano General Plan are applicable to the proposed project:

- **Environmental Justice Element Policy 2.2:** Work with federal, state, and county governments to identify opportunities and investments to create jobs that are safe and sustainable and promote clean energy solutions.
- **Conservation and Open Space Policy 6.6:** Promote energy conservation and recycling by the public and private sector.

In addition, the City promotes energy conservation by implementing State of California Title 24 energy performance requirements through its building code. The relationship between project design and future energy requirements would also be considered when reviewing proposals for new development. Promotion of utility company incentive programs to retrofit existing development with energy efficient lighting, air conditioning and heating systems can be beneficial. Energy will be conserved in public buildings, and the provision of electric charging vehicle areas will be encouraged in new public and private developments.

City of San Juan Capistrano Municipal Code. The City adopted the 2022 California Building Codes and incorporated them by reference into the City Municipal Code (Chapter 2, Building Code – Adopted on December 12, 2025).

4.5.4 Methodology

The energy use analysis discussed in this section is based on information from the California Emissions Estimator Model (CalEEMod) version 2022.1 modeling results provided in **Appendix C** of this Draft EIR. This analysis focuses on the four sources of energy that are relevant to the proposed project: electricity, natural gas, the fuel necessary for project construction, and vehicle fuel necessary for project operations. Operational fuel consumption (diesel fuel and gasoline) from vehicle trips was estimated for the proposed project based on vehicle trip estimates from CalEEMod and fuel efficiencies from the California Air Resources Board (CARB) EMFAC2021 model. To assist in the analysis and provide context, the amount of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to consumption in Orange County as a whole. The proposed project's electricity and natural gas use is analyzed on an annual basis, similar to construction and operational fuel use. CalEEMod contains default values for electricity and natural gas usage, which were used in this analysis.

As described in Section 4.2, Air Quality, this analysis was conducted using land use codes: *Place of Worship, Single Family Housing, High Turnover (Sit Down Restaurant), Medical Office Building, Arena, General Office Building, Parking Lot, Other Non-Asphalt Surfaces,* and *City Park*. CalEEMod does not currently include land uses for horse and veterinary barns, amenities buildings, or agricultural and event barns; therefore, the selected CalEEMod land use types reflect conservative assumptions. The amenities/catering building was modeled using the *High Turnover (Sit-Down Restaurant)* land use type. This land use typically includes full-service restaurants with high internal energy demand (e.g., commercial kitchens, refrigeration, dishwashing equipment, and extended operating hours), which may overestimate energy consumption. Similarly, *Medical Office Building* and *General Office Building* land use types were applied to represent the horse barn, veterinary barn, and agricultural event barn. Lastly, the roping and warm up arenas were modeled using the Arena land use category. These land use types are more intensive in terms of internal building energy use, conditioned space, lighting, ventilation, and plug loads than the agricultural and livestock-related structures included in the project, which would have substantially lower energy demands and more limited occupancy. Using these land use types ensures that the analysis does not underestimate potential energy consumption and instead provides a conservative estimate.

Furthermore, CalEEMod assumes natural gas usage by default. However, natural gas consumption for the proposed project would be limited to the commercial kitchen. Therefore, consistent with the

project design plans, this analysis adjusts the model inputs so that natural gas usage is only attributed to the commercial kitchen use associated with the Ranch House and agricultural catering building.

Estimates of fuel consumption (diesel fuel and gasoline) from construction trucks and construction worker vehicles were based on trip estimates from CalEEMod and fuel efficiencies from the CARB EMFAC2021 model. Fuel use associated with vehicle and truck trips generated by the proposed project was calculated based on the project's trip generation described in Section 4.11, Transportation, which identifies that the proposed project would generate approximately 1,104 average daily trips[14]. To maintain internal consistency, the modeled trip rates in CalEEMod were scaled to match the project-specific trip generation identified in Section 4.11, Transportation.

4.5.5 Thresholds of Significance

The thresholds for energy impacts used in this analysis are consistent with Appendix G of the State Guidelines for the Implementation of CEQA of 1970 (*State CEQA Guidelines*). The proposed project may be deemed to have a significant impact with respect to energy if it would:

Threshold 4.5.1: Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

Threshold 4.5.2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.5.6 Project Impacts

As discussed in Section 3.6 of the Initial Study (**Appendix B**), the proposed project would include energy efficiency measures in compliance with Title 24 and CALGreen standards, which are consistent with the CPUC Strategic Plan strategies and the IEPR building energy efficiency recommendations. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Threshold 4.5.2). Therefore, this topic is not discussed further in this Draft EIR.

Threshold 4.5.1: Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact.

[14] This analysis evaluated project emissions based on a trip generation rate of 1,149 average daily trips (ADT). The project's trip generation has since been refined to 1,104 ADT. This revised trip generation was reviewed by LSA and determined to result in lower fuel consumption and, therefore, would not generate more severe energy usage impacts than those described in this analysis. Accordingly, the use of the higher trip generation in this analysis represents a conservative assumption.

Discussion of Effects: The proposed project would consume energy through fuel usage associated with project construction and day-to-day operations. This section discusses energy use resulting from the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

Construction. Project construction activities would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Construction activities would include demolition, site preparation, grading, building construction, paving, and architectural coatings (painting). The construction-related equipment would be fueled by diesel fuel and gasoline. No natural gas demand is anticipated during construction. While some electricity may be required during construction activities, associated with generators and lighting, this analysis assumes that most energy required during project construction would be associated with fuel consumption.

Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption. Construction trucks and vendor trucks hauling materials to and from the project site would be anticipated to use diesel fuel, whereas construction workers traveling to and from the project site would be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from CalEEMod and fuel efficiencies from EMFAC2021. This analysis is consistent with the CalEEMod modeling assumptions described in Section 4.2, Air Quality.

Fuel consumption estimates are presented **in Table 4.5.A: Energy Consumption Estimates During Construction**. CalEEMod output sheets are included in **Appendix C** and detailed energy calculations are included in **Appendix G** of this Draft EIR.

Table 4.5.A: Energy Consumption Estimates During Construction

Energy Type	Total Energy Consumption	Annual Energy Consumption
Gasoline (gallons)	34,978.0	11,659.3
Diesel Fuel (gallons)	144,643.0	48,214.3

Source: Compiled by LSA (May 2026).

As indicated in **Table 4.5.A**, construction associated with the proposed project would consume approximately 34,978.0 gallons of gasoline and approximately 144,643.0 gallons of diesel fuel. As discussed above, the proposed project would be constructed over an approximately three-year period; therefore, when averaged over three years, the proposed project would consume approximately 11,659.3 gallons of gasoline per year and 48,214.3 gallons of diesel fuel per year

during construction. Based on fuel consumption obtained from EMFAC2021, approximately 1.1 billion gallons of gasoline and approximately 155.2 million gallons of diesel will be consumed from vehicle trips in Orange County in 2029. Therefore, construction associated with the proposed project would increase the annual fuel consumption from vehicle trips in Orange County by approximately less than 0.01 percent for gasoline fuel usage and approximately 0.03 percent for diesel fuel usage. Based on current crude oil production, it is assumed that there would be sufficient gasoline and diesel fuel to meet the project's needs.[15]

Due to the minimal increase in annual fuel consumption in Orange County, project construction activities would have a negligible effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Orange County's overall use of the State's available energy resources. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. The proposed project would also utilize construction equipment that meets Tier 3 emissions standards or higher, which would ensure fuel efficiency. Assuming the use of Tier 3 construction equipment is conservative as construction contractors would utilize Tier 4 equipment when feasible. Construction of the proposed project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. Additionally, construction equipment and trucks would comply with CARB's anti-idling regulations, including the In-Use Off-Road Diesel-Fueled Fleets regulation, which would result in efficient use of construction-related energy and reduce fuel consumption. Furthermore, on-road vehicles, such as haul trucks and worker vehicles, would be subject to federal fuel efficiency requirements. For these reasons, the proposed project would not cause wasteful, inefficient, or unnecessary consumption of energy resources during construction, and impacts would be **less than significant**.

Operation. Energy use associated with operation of the proposed project would consist of natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. Energy consumption was estimated for the proposed project using default energy intensities by land use type in CalEEMod.

The proposed project would result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle and truck trips. Fuel use associated with vehicle and truck trips generated by the proposed project was calculated based on the project's trip generation described in Section 4.11, Transportation, which identifies that the proposed project would generate approximately 1,149 average daily trips. The amount of operational fuel use was estimated using CARB's EMFAC2021 model, which provided projections for typical daily fuel usage associated with vehicles and trucks in Orange County.

[15] United States Energy Information Administration. 20. *Short-Term Energy Outlook.* Website: https://www.eia.gov/outlooks/steo/report/petro_prod.php (accessed January 2026).

Electricity and fuel usage estimates associated with the proposed project are shown in **Table 4.5.B**: **Energy Consumption Estimates**.

Table 4.5.B: Energy Consumption Estimates

Energy Type	Annual Energy Consumption
Electricity Consumption (kWh/year)	1,618,159.0
Natural Gas Consumption (therms/year)	13,680.0
Fuel Consumption	
Gasoline (gallons/year)	110,565.4
Diesel Fuel (gallons/year)	16,831.9

Source: Compiled by LSA (February 2026).
kWh = kilowatt-hours

Building Energy Use. As shown in **Table 4.5.B**, the estimated potential increase in operational electricity demand associated with the proposed project is 1,618,159 kWh per year. Total electricity demand in Orange County in 2024 was 19,225 GWh (19,225,000,000 kWh). Therefore, operational activities associated with the proposed project would increase the annual electricity consumption in Orange County by approximately 0.01 percent. Additionally, the estimated potential increase in operational natural gas demand associated with the proposed project is 13,680 therms per year. Total natural gas consumption in Orange County in 2024 was 561.7 million therms. Therefore, operational activities associated with the proposed project would negligibly increase the annual natural gas consumption in Orange County by approximately 0.01 percent.

The proposed project's electrical and natural gas demand would be relatively small in comparison to Orange County's overall use of the State's available electricity resources. Therefore, the proposed project's electrical demand would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. In addition, SDG&E is the private utility that would supply the proposed project's electricity services. SDG&E is positioned to meet the State's 60 percent goal for renewable energy by 2030 and the 100 percent goal for achieving carbon neutrality by 2045 mandate set forth in SB 100. SDG&E plans to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

The proposed project would be constructed using energy efficient modern building materials and construction practices, and would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The project would also be designed and constructed in accordance with applicable State regulations that promote energy efficiency and integration of renewable energy. Specifically, all buildings would comply with Title 24 Building Energy Efficiency Standards and CALGreen requirements, which establish minimum energy performance standards for building systems (e.g., heating, cooling, lighting, and insulation) and reduce overall energy demand. In addition, Title 24 requires the incorporation of solar photovoltaic (PV) systems for new residential development and facilitates installation of renewable systems for non-residential uses. Examples of renewable systems for non-residential uses would

include PV systems with battery backup energy storage systems, use of heat pumps for space and water heating, and improved building ventilation.[16]

Consistent with these requirements, the proposed project would include solar PV systems, including installation on structures such as the equestrian arenas within the Equestrian Core. The project site layout and building design would allow for incorporation of rooftop solar PV systems and other renewable technologies where feasible, consistent with market conditions and regulatory requirements at the time of development. While the final design of specific renewable energy systems would be determined at the project implementation stage, the regulatory framework and design flexibility associated with the proposed project support reliance on electricity, a growing share of which is generated from renewable sources. As described above, SDG&E would supply electricity to the project and is subject to California's RPS under SB 100. SDG&E is required to procure at least 60 percent of its retail electricity sales from renewable resources by 2030 and transition to a carbon-neutral electricity supply by 2045. As a result, a substantial and increasing portion of the electricity consumed by the project over time would be sourced from renewable generation (e.g., solar, wind, and geothermal). Therefore, the project's operational electricity demand would be increasingly met with renewable energy, further reducing reliance on fossil fuel-based energy sources at the grid level.

Although energy consumption is influenced by building design, operational characteristics, and occupant behavior, the operational energy demand for the proposed project has been estimated using CalEEMod default energy use intensity values, which are based on statewide data sources and are widely accepted for CEQA analysis. Accordingly, the estimated electricity and natural gas consumption reflects representative and standardized assumptions for the proposed land uses, which represent a conservative energy consumption for the proposed project. As shown in Table 4.5.B, the project's incremental contribution relative to existing countywide energy demand would be minimal and would not represent a substantial increase in the demand for electricity or natural gas supplies or infrastructure. Therefore, electrical and natural gas demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. As a result, the proposed project would be consistent with State goals to decrease reliance on fossil fuels and increase the use of renewable energy.

Transportation Fuel Use. The proposed project would also result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle trips. As shown in **Table 4.5.B**, fuel use associated with the vehicle trips generated by proposed project is estimated at approximately 110,565.4 gallons of gasoline and 16,831.9 gallons of diesel fuel per year. Based on fuel consumption obtained from EMFAC2021, approximately 1.0 billion gallons of gasoline and approximately 150.7 million gallons of diesel will be consumed from vehicle trips in Orange County in 2032. Therefore, vehicle trips associated with the proposed project would increase the annual fuel consumption in Orange County by approximately 0.02 percent for gasoline fuel usage and approximately 0.01 percent for diesel fuel usage. Therefore, gasoline and diesel fuel demand

[16] California Energy Commission, 2025 California Energy Code Fact Sheet. Website: https://www.energy.ca.gov/sites/default/files/2024-09/2025_California_Energy_Code_Fact_Sheet_ada.pdf (Accessed June 22, 2026).

generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in Orange County.

Vehicles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. The fuel efficiency of vehicles associated with future project operations would increase throughout the life of the project due to increasingly stringent standards over time. As discussed in Section 4.11, Transportation, and detailed in **Mitigation Measure TRA-1** in that section, the proposed project would be required to implement several VMT reduction measures, which could further reduce fuel consumption associated with project-related vehicle travel. VMT reduction measures included in **Mitigation Measure TRA-1** include (1) providing end of trip bicycle facilities, including secure bicycle parking, lockers, and showers, which support bicycle commuting and can reduce VMT by up to 4.4 percent; and (2) providing pedestrian network improvements, including enhancing the walkability of the project site through improved sidewalks and pedestrian connections, offering up to a 6.4 percent reduction in VMT. Collectively, these measures would decrease reliance on personal vehicles, reduce overall VMT, and consequently lower the project's long-term fuel consumption.

In addition, since the proposed project would support the ability of visitors to use alternative transportation and would result in fuel usage that is a small fraction of current annual fuel use in Orange County, fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Therefore, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be **less than significant**, and no mitigation is required.

4.5.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for energy. The cumulative impact area for energy is the City of San Juan Capistrano, including the cumulative projects listed in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required. The proposed project would result in an increase in energy demand that would impact the existing demand for electricity and vehicle fuel. Therefore, a cumulative analysis is necessary to determine if the proposed project would result in an inefficient, wasteful, and unnecessary consumption of energy that would be cumulatively considerable. The geographic area for cumulative analysis of electricity is that of the SDG&E service area, while the geographic area for cumulative analysis of natural gas service is that of the SoCalGas service area.

Although the proposed project would result in an increase in demand for electricity, this increase would not require SDG&E to expand or construct infrastructure that could cause substantial environmental impacts. As discussed previously, total electricity consumption in the SDG&E service area in 2024 was 16,786 GWh. By 2030, consumption is anticipated to increase by 12,000 GWh for the low-demand scenario and by 22,000 GWh for the high-demand scenario.[17] While this forecast represents a large increase in electricity consumption, the proposed project's share of cumulative consumption would be negligible. The proposed project, in combination with cumulative development, is well within SDG&E's system-wide net annual increase in electricity supplies over the 2018 to 2030 period, and there are sufficient planned electricity supplies in the region for estimated net increases in energy demands.

Similarly, additional natural gas infrastructure is not anticipated due to cumulative development. Total natural gas consumption in the SoCalGas service area in 2024 was 4,959 million therms. Between 2018 and 2030, total natural gas consumption in the SoCalGas service area is forecast to remain steady for the low- and mid-demand scenarios and to increase by approximately 650 million therms in the high-demand scenario due to intense energy efficiency efforts.[18] As mentioned in the preceding sections, natural gas consumption associated with the proposed project would be limited to the commercial kitchen. Therefore, the proposed project's share of cumulative consumption of natural gas in the SoCalGas service area would be negligible. It is anticipated that SoCalGas would be able to meet the natural gas demand of cumulative development without additional facilities. In addition, both SCE and SoCalGas demand forecasts include the growth contemplated by the proposed project and the other cumulative development within their respective service areas. Increased energy efficiency to comply with building energy efficiency standards would reduce energy consumption on a per-square-foot basis. Furthermore, utility companies are required to increase their renewable energy sources to meet the Renewable Portfolio Standards mandate of 60 percent renewable supplies by 2030. SCE and SoCalGas plan to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

Transportation energy use would also increase; however, as described in Section 4.5.6, Project Impacts, this transportation energy use would not represent a major amount of energy use compared to the amount of existing development and to the total number of vehicle trips and VMT throughout Orange County and the region. The proposed project and cumulative development are required to comply with various federal and State government legislation to improve energy efficiency in buildings, equipment, and appliances and to reduce VMT.

Cumulative impacts from the proposed project would not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the cumulative energy impacts of the proposed project and the cumulative projects would be **less than cumulatively considerable.**

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17 California Energy Commission (CEC). 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed February 2026).

18 California Energy Commission (CEC). 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed February 2026).

4.5.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to energy, and no mitigation is required.

4.5.9 Regulatory Compliance Measures and Mitigation Measures

4.5.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.5.9.2 Mitigation Measures

No mitigation measures are required.

4.5.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to energy, and no mitigation is required.

4.6 GEOLOGY AND SOILS

This section discusses the existing setting for geology and soils and provides an analysis of the potential significant impacts anticipated with implementation of the proposed Legacy Ranch Project (proposed project) related to geology and soils. This section also addresses potential impacts due to the local geology underlying the project site, as well as slope stability, ground settlement, soil conditions, grading, and regional and local seismic conditions. The information in this section is based, in part, on the *Geotechnical Investigation and Preliminary Design Recommendations Report, San Juan Capistrano Legacy Ranch Northwest Open Space, San Juan Capistrano, California* (Geotechnical Investigation)[1] (**Appendix H**) prepared for the project site by GMU Engineers & Geologists and dated October 9, 2025.

4.6.1 Scoping Process

The City of San Juan Capistrano (City) received no comments during the scoping period for this Draft Environmental Impact Report (EIR) (November 13 through December 15, 2025) concerning the proposed project's potential impacts to geology and soils. In addition, no comments pertaining to geology and soils were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** to this Draft EIR.

4.6.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan area in San Juan Capistrano, Orange County. The irregularly shaped project site is largely undeveloped with the exception of the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site and there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site.

4.6.2.1 Regional Geology

The project site is located near the southeastern portion of the San Joaquin Hills within the Peninsular Ranges Geomorphic Province. While the San Joaquin Hills represents the local topographic high, the project site itself is situated within an adjacent valley. According to the Geotechnical Investigation (**Appendix H**), the project site's geology was created by the Capistrano Embayment, a broad synclinal basin that is centered around San Juan Capistrano and is responsible for the deposition of the sediments that form the bedrock of the Capistrano Formation. In addition, the geologic map for the *San Juan Capistrano* 7.5-minute quadrangle Orange County, California, indicates that the regional geology is characterized by surficial deposits overlying the Capistrano Formation.

[1] GMU Engineers & Geologists. 2025. *Geotechnical Investigation and Preliminary Design Recommendations Report, San Juan Capistrano Legacy Ranch Northwest Open Space, San Juan Capistrano, California*. October 9, 2025.

4.6.2.2 Project Site and Vicinity

Subsurface exploration performed as part of the Geotechnical Investigation for the proposed project indicated that the underlying geologic units at the project site include undocumented artificial fills, topsoil, Quaternary-aged alluvium and terrace deposits, and Tertiary-aged claystone of the Capistrano Formation.

The relatively young alluvial soils are located on the eastern portion of the project site and are associated with deposition from Trabuco Creek fluvial activity. The alluvial soils are located along both the banks of Trabuco Creek, with more recent deposits within the creek bed. The alluvial soils are generally fine grained (i.e., silts and clays) within the proposed development area east of the creek (i.e., Community Building Core), and relatively granular in the large development area west of the creek (i.e., Event Barn Core, Equestrian Core, and Trails/Natural Core). The older terrace deposits associated with ancient fluvial activity of the proto-Trabuco and -Oso Creek water sheds are located on the western side of the project site and form an elevated terrace on the project site. Overall, the majority of the proposed development area is underlain by the terrace deposits.

The following provides a detailed description of the subsurface materials observed in the borings and test pits:

- **Undocumented Artificial Fill (Qafu)**
    - West of Trabuco Creek: Based on review of historic aerial photographs, the project site was likely partially graded for development of the citrus grove associated with the Swanner House. As a result of this grading, the project site is underlain locally by 2 to 2.5 feet of undocumented artificial fill materials. However, the Geotechnical Investigation noted that local areas of shallower or deeper fills may be encountered during future project site grading. The fill predominantly consists of brown silty sands with some occurrences of clayey sands. According to the Geotechnical Investigation, the fills were dry to damp to moist, and loose to medium dense.
    - East Side of Trabuco Creek: The alluvial soils on the east side of Trabuco Creek are also capped with up to approximately 2.5 feet of undocumented artificial fill, comprised of loose to medium dense sandy clay.
- **Topsoil**
    - West of Trabuco Creek: Topsoil, between 2 and 2.6 feet thick, was encountered in the test pits in the portion of the project site west of Trabuco Creek. The soil in these areas consists of silty sand that is light brown to brown and dry. These soils appear to be derived from the underlying terrace deposits and alluvium.
    - East Side of Trabuco Creek: Although no topsoil was observed in the boring on the east side of Trabuco Creek, the Geotechnical Investigation indicated that 2 to 2.5 feet of topsoil is likely present locally within the proposed development area on the east side of Trabuco Creek (i.e., Community Building Core).

- **Alluvial Deposits (Qal)**

    - West of Trabuco Creek: Alluvial deposits were encountered adjacent to the west side of Trabuco Creek. Where encountered, the alluvial materials generally consist of silty sand and sand, with lesser amounts of sandy clay and sandy silt. These materials were observed to range from loose to dense in consistency and exhibit variable moisture contents.

    - East Side of Trabuco Creek: The upper alluvial soils east of the creek generally consist of clays, fat clays, and silty clays. Poorly graded sands were also encountered from 35 to 42 feet. According to the Geotechnical Investigation, the soils are moist to very moist and stiff and medium dense to very stiff and dense.

- **Terrace Deposits (Qt):** Terrace deposits were encountered through the majority of the proposed development area west of Trabuco Creek. These materials are ancient fluvial deposits that were deposited on the Trabuco and Oso Creek floodplains and subsequently uplifted to their current elevation. The terrace deposits are anticipated to be approximately 50 to 60 feet thick and composed of light to dark brown silty sand and clayey sand. According to the Geotechnical Investigation, the terrace deposits also had lesser amounts of poorly to well graded sands and sandy clays. Finally, trace amounts of gravel were encountered at greater depths. These soils are generally slightly moist to very moist and stiff to medium dense, and the moisture content of these soils increases with depth.

- **Capistrano Formation (Tc):** The Capistrano Formation underlies the project site and consists of siltstone, sandy siltstone, and claystone, with minor sandstone interbeds. Claystone bedrock was encountered at a depth of 42 feet and was observed to consist of predominantly moist, hard, greenish gray to black claystone.

4.6.2.3 Faulting and Seismicity

Most of Southern California is subject to some level of ground shaking (ground motion) because of movement along active and potentially active fault zones in the region and several sizeable, historic earthquakes have occurred in Southern California.

The project site is located within a seismically active region; however, it is not located within the boundaries of an identified Earthquake Fault Zone for fault rupture hazard as defined by the Alquist-Priolo Earthquake Fault Zoning Act of 1972.[2] In addition, no known active faults were observed on the geologic maps crossing the project site reviewed as part of the Geotechnical Investigation. The project site is, however, located within close proximity to several surface faults that are presently zoned as active or potentially active by the California Geological Survey (CGS). The nearest known active fault is the San Joaquin Hills blind thrust fault, which is located approximately 5.1 miles from the project site and is capable of generating a maximum earthquake magnitude (Mw) of 7.1. The

[2] California Department of Conservation (DOC). 2019. CGS Seismic Hazards Map. <https://maps-cnra-cadoc.opendata.arcgis.com/datasets/cadoc::cgs-seismic-hazards-program-alquist-priolo-fault-hazard-zones/explore? location=34.063088%2C-117.244306%2C11.59> (accessed July 2025).

project site is also located within 6.3 miles of the Newport Inglewood fault, which is capable of generating a 7.5 Mw earthquake.

4.6.2.4 Groundwater Conditions

According to the Geotechnical Investigation, groundwater was encountered in drill holes at the project site between 39.8 and 53.8 feet below ground surface (bgs). However, the Geotechnical Investigation notes that this is not in general agreement with the depth of historically high groundwater provided in the Seismic Hazard Zone Report for the *San Juan Capistrano* quadrangle, Orange County, California, which indicates that historic high groundwater is 5 feet bgs. Seasonal fluctuations in the groundwater level may occur.

In addition, Trabuco Creek, which runs through the southern portion of the project site, exerts influence on groundwater levels near the creek. Another source of groundwater is Oso Creek, which is located between approximately 150 to 300 yards west of the project site. Although more distant, Oso Creek may also exert a localized influence on groundwater conditions. Measurements from a nearby monitoring well indicate deeper groundwater at elevations of between 141 and 143 feet or 49 and 67 feet bgs.

4.6.2.5 Landslides

According to the Seismic Hazard Zone map for the *San Juan Capistrano* 7.5-minute quadrangle Orange County, California, and the Department of Conservation, the project site does not lie within an area that is susceptible to earthquake-induced landsliding.[3]

4.6.2.6 Liquefaction and Lateral Spreading

Liquefaction and dynamic settlement of soils can be caused by strong vibratory motion due to earthquakes. Both research and historical data indicate that loose, saturated, granular soils or soils of low plasticity are susceptible to liquefaction and dynamic settlement. Liquefaction is typified by a loss of shear strength in the affected soil layer, thereby causing the soil to act as a viscous liquid. This effect may be manifested by excessive settlements and sand boils at the ground surface. According to the Department of Conservation, the project site is located within a liquefaction zone and is potentially susceptible to liquefaction.[4]

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "unconfined" face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane and is often associated with liquefaction. Because the project site is potentially susceptible to liquefaction, the

[3] California Department of Conservation (DOC). 2019. CGS Seismic Hazards Map. <https://maps-cnra-cadoc.opendata.arcgis.com/datasets/cadoc::cgs-seismic-hazards-program-alquist-priolo-fault-hazard-zones/explore? location=34.063088%2C-117.244306%2C11.59> (accessed July 2025).

[4] California Department of Conservation. n.d.-a. California Geological Survey, Earthquake Zones of Required Investigation. <https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/#data_s=id%3AdataSource_4-191d8e4b825-layer-21%3A1163> (accessed July 2025).

Geotechnical Investigation determined that the project site's potential for post-earthquake lateral deformations/lateral spreading is considered high adjacent to Trabuco Creek.

4.6.2.7 Expansion Potential

Expansive soils contain types of clay minerals that occupy considerably more volume when they are wet or hydrated than when they are dry or dehydrated. Volume changes associated with changes in the moisture content of near-surface expansive soils can cause uplift or heave of the ground when they become wet or, less commonly, cause settlement when they dry out. According to the Geotechnical Investigation, the terrace deposits (Qt) located west of Trabuco Creek are anticipated to be granular with a very low to low expansion potential. However, based on expansion index testing of subsurface soils, the on-site soils east of Trabuco Creek have a medium to high expansion potential.

4.6.2.8 Paleontological Resources

Project plans, geologic maps of the project site, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from similar geologic units elsewhere in the region. In addition, a search for known fossil localities was conducted through the Natural History Museum of Los Angeles County (NHMLAC) to determine the status and extent of previously recorded paleontological resources within and surrounding the project site.

Results of the literature review indicate that the project site is located at the northern end of the Peninsular Ranges Geomorphic Province, a 900-mile-long northwest-southeast-trending structural block that extends from the Transverse Ranges in the north to the tip of Baja California in the south.[5,6] Within this larger region, the project site is located in the Los Angeles Basin, a broad alluvial lowland bounded to the north and east by the San Gabriel and Santa Ana Mountains, respectively, and by the Pacific Ocean to the southwest.[7] Surficial geologic mapping indicates that the entire project site contains Young Axial Channel Deposits.[8]

The Young Axial Channel Deposits are Holocene to late Pleistocene in age (less than 129,000 years ago) and consist of slightly to moderately consolidated silt, sand, and gravel.[9] They formed as streams and washes carried sediment down from higher elevations in the foothills of the Santa Ana Mountains.

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5 California Geological Survey. 2002. California Geomorphic Provinces. California Geologic Survey Note 36. California Department of Conservation.

6 Norris, R.M., and R.W. Webb. 1976. *Geology of California.* New York, John Wiley & Sons, Inc. 379 pp.

7 Yerkes, R.F., T.H. McCulloh, J.E. Schoellhamer, and J.G. Vedder. 1965. *Geology of the Los Angeles Basin, California – An Introduction.* United States Geological Survey Professional Paper 420-A. 57 pp.

8 Morton, Douglas M., and Fred K. Miller. 2006. Geologic Map of the *San Bernardino* and *Santa An*a 30-minute by 60-minute quadrangles, California. Digital preparation by Pamela M. Cosette and Kelly R. Bovard. Prepared by the United States Geological Survey (USGS) in cooperation with the California Geological Survey. USGS Open File Report 2006-1217. Map Scale 1:100,000.

9 Ibid.

Although Holocene (less than 11,700 years ago) deposits can contain remains of plants and animals, only those from the middle to early Holocene (4,200–11,700 years ago)[10] are considered scientifically important,[11] and fossils from this time interval are not very common. The Holocene deposits overlie older, Pleistocene deposits, which have produced scientifically important fossils elsewhere in Orange County and the region (Springer et al. 2009).[12,13,14,15,16] These older, Pleistocene deposits span the end of the Rancholabrean North American Land Mammal Age (NALMA), which dates from 11,000 to 240,000 years ago[17] and was named for the Rancho La Brea fossil site in central Los Angeles. The presence of Bison defines the beginning of the Rancholabrean NALMA,[18] but fossils from this time also include other large and small mammals, reptiles, fish, invertebrates, and plants. There is a potential to find these types of fossils in the older sediments of this geologic unit, which may be encountered below a depth of approximately 10 feet. Therefore, these deposits are assigned low paleontological sensitivity from the surface to a depth of 10 feet and high sensitivity below that depth.

According to the locality search conducted by the NHMLAC, there are no known fossil localities within the project site. However, the NHMLAC has a record of a fossil locality nearby from sedimentary deposits similar to those likely present at depth within the project site. The closest locality is LACM VP 5502 – 5506, 4979 – 4983, LACM IP 6299 – 6320 located approximately one mile northwest of the project site from the Capistrano Formation and produced remains of whale (Cetacea) and other various cataloged vertebrates and invertebrates. The next closest locality,

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10 Cohen, K.M., S.C. Finney, P.L. Gibbard, and J.-X. Fan. 2024. The ICS International Chronostratigraphic Chart. Updated December 2024. Episodes 36: 199–204.

11 Society of Vertebrate Paleontology (SVP). 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources.* Society of Vertebrate Paleontology. Impact Mitigation Guidelines Revision Committee, p. 1–11.

12 Jefferson, George T. 1991a. *A Catalogue of Late Quaternary Vertebrates from California: Part One: Non-marine Lower Vertebrate and Avian Taxa.* Natural History Museum of Los Angeles County Technical Reports No. 5, Los Angeles.

13 Jefferson, George T. 1991b. *A Catalogue of Late Quaternary Vertebrates from California: Part Two: Mammals.* Natural History Museum of Los Angeles County Technical Reports No. 7, Los Angeles.

14 Miller, W.E. 1971. *Pleistocene Vertebrates of the Los Angeles Basin and Vicinity (Exclusive of Rancho La Brea).* Los Angeles County Museum of Natural History Bulletin, Science: No. 10.

15 Reynolds, R.E., and R.L. Reynolds. 1991. The Pleistocene Beneath Our Feet: Near-surface Pleistocene Fossils in Inland Southern California Basins. In M.O. Woodburne, R.E. Reynolds, and D.P. Whistler, eds., *Inland Southern California: The Last 70 Million Years.* San Bernardino County Museum Special Publication 38(3 and 4): 41–43.

16 Springer, Kathleen, Eric Scott, J. Christopher Sagebiel, and Lyndon K. Murray. 2009. The Diamond Valley Lake Local Fauna: Late Pleistocene Vertebrates from Inland Southern California. In L.B. Albright, III, ed. *Papers in Geology, Vertebrate Paleontology, and Biostratigraphy in Honor of Michael O. Woodburne.* Museum of Northern Arizona Bulletin 65, pp. 217–236.

17 Sanders, A.E., R.E. Weems, and L.B. Albright. 2009. *Formalization of the Middle Pleistocene "Ten Mile Beds" in South Carolina with Evidence for Placement of the Irvingtonian-Rancholabrean Boundary.* Museum of Northern Arizona Bulletin 64:369–375.

18 Bell, Christopher J., Ernest L. Lundelius, Jr., Anthony D. Barnosky, Russell W. Graham, Everett H. Lindsay, Dennis R. Ruez, Jr., Holmes A. Semken, Jr., S. David Webb, and Richard J. Zakrzewski. 2004. The Blancan, Irvingtonian, and Rancholabrean Mammal Ages. Chapter 7 in Michael O. Woodburne, ed., *Late Cretaceous and Cenozoic Mammals of North America.* pp. 232–314.

approximately one mile southeast of the project site from the Marbella Golf and Country Club, also from the Capistrano Formation, produced several vertebrate fossils, including white shark (*Carcharodon carcharias*), megalodon shark (*C. megalodon*), requiem shark (*Carcharhinus*), mako sharks (*Isurus planus*, *Isurus oxyrinchus*), weasel shark (*Hemipristis serra*), sixgill shark (*Hexanchus*), eagle ray (*Myliobatis*), sheephead (*Semicossyphus pukcher*), flightless alcid (*Mancalla diegense*), grebe (*Podiceps parvus*), pelican (Pelecaniformes), cormorant (Phalacrocoracidae), sea lion (Otarinae), eared seal (Otariidae), walrus family (Odobeninae), dugong (Dugongidae), dolphin (*Parapontoporia*, *Stenella*), sperm whale (*Scaldicetus*), toothed whale (Odontoceti), baleen whale (Mysticeti), western pond turtle (*Clemmys marmorata*), elephant family (Proboscidea), antelope family (Antelocapridae), camel family (Camelidae), and invertebrates (*Acila*). Locality LACM 5002, located approximately 1.7 miles northwest of the project site, produced remains of baleen whale (Mysticeti) from the Capistrano Formation. Approximately 2.3 miles northwest of the project site, from late Pleistocene deposits, locality LACM 1215 produced remains of shark and unspecified mammals. The last locality is LACM 1115, from approximately 2.8 miles southwest of the project site, from Pleistocene terrace deposits, remains of Mammoth (*Mammuthus*) were collected.

4.6.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to geology and soils that are relevant to the proposed project.

4.6.3.1 Federal Policies and Regulations

There are no federal policies or regulations related to geology and soils that apply to the proposed project.

4.6.3.2 State Policies and Regulations

Alquist-Priolo Earthquake Fault Zoning Act (1972). The Alquist-Priolo Earthquake Fault Zoning Act of 1972 and updates (California Public Resources Code [PRC], Section 2621, et seq.) is the principal State guidance to prevent the construction of habitable structures on the surface trace of active earthquake faults. If an active fault is found, a structure for human occupancy must be set back from the fault (generally a 50-foot setback). The Alquist-Priolo Earthquake Fault Zoning Act only addresses the hazard of surface fault rupture; it does not consider other earthquake hazards.

Seismic Hazard Mapping Act (1990). The Seismic Hazard Mapping Act (SHMA) was adopted by the State in 1990 to address the potential hazards posed by secondary effects of seismic activity, including strong ground shaking, soil liquefaction, and associated ground failure and seismically induced landslides. The California Geological Survey (CGS) prepares and provides local governments with seismic hazard zone maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. The seismic hazard zones are referred to as “zones of required investigation” because site-specific geological investigations are required for construction projects located within these areas. Before a project can be permitted, a geologic investigation, evaluation, and written report must be prepared by a licensed geologist to demonstrate that the potential hazards can be successfully mitigated.

California Building Code. Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission, and the code is promulgated at Title 24, Part 2, of the California Code of Regulations (CCR). The 2025 CBC took effect on January 1, 2026. Local jurisdictions often adopt local, more restrictive amendments that are based on local geographic, topographic, or climatic conditions. These codes provide minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions.

The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock on site, and the strength of ground shaking with a specified probability at a site. The seismic ratings used in Section 1613.2 of the CBC are derived from the International Building Code specifications. The project site, as well as most of Southern California, is located in Seismic Design Category D, which indicates areas expected to experience severe and destructive ground shaking but not located close to a major fault.

California Occupational Safety and Health Administration Regulations. The California Occupational Safety and Health Administration (Cal/OSHA) Regulations are codified as California Code of Regulations (CCR), Title 8. These regulations establish occupational safety standards for excavation, shoring, and trenching activities, as well as other construction activities.

Requirements for Geotechnical Investigations. Requirements for geotechnical investigations in Section 1803 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be completed as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

California Public Resources Code Section 5097.5. Section 5097.5 of the PRC provides for the protection of cultural and paleontological resources and prohibits the removal, destruction, injury, or defacement of archaeological and paleontological features on any lands under the jurisdiction of State or local authorities. Specifically, PRC Section 5097.5 states the following:

- A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.

- As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

A violation of this section is a misdemeanor.

4.6.3.3 Regional Regulations

There are no regional policies or regulations related to geology and soils that apply to the proposed project.

4.6.3.4 Local Regulations

City of San Juan Capistrano General Plan. The Safety and Cultural Resources Elements of the City's General Plan contain the following goals and implementing policies related to geologic hazards and paleontological resources that would be applicable to the proposed project:

- **Safety Goal 1:** Reduce the risk to the community from hazards related to geologic conditions seismic activity, wildfires, flooding, and climate change.
    - **Policy 1.1:** Reduce the risk of impacts from geologic and seismic hazards by applying proper development engineering, building construction, and retrofitting requirements.
- **Cultural Resources Goal 1:** Preserve and protect historical, archaeological, and paleontological resources.

City of San Juan Capistrano Municipal Code. While the CBC provides minimum standards for building design in the State, local codes are permitted to be more restrictive than the CBC, but not less restrictive. Building and construction in the city are subject to the regulations of the City's Municipal Code, which has adopted standards that are at least as restrictive as CCR Title 24, Part 2, of the CBC (2025). The procedures and limitations for the design of structures are based on site characteristics, occupancy type, configuration, structural system height, and seismic design category. Uses constructed as part of the project would adhere to the seismic and building standards in the City's Building Code and the CBC.

The following provisions of the City of San Juan Capistrano Municipal Code address geologic hazards and paleontological resources:

- **Title 8, Chapter 2, Building Code.** Title 8, Chapter 2 of the City's Municipal Code adopts the 2025 California Building Code (CBC) and provides regulations for construction of buildings and structures. The purpose of a building code is to provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within the City. Building Code provisions apply to the construction, alteration, moving, demolition, repair, and use of any building or structure within the City.

4.6.4 Methodology

To assess the impacts of the proposed project with respect to geological and soil conditions, GMU Engineers & Geologists conducted a Geotechnical Investigation (**Appendix H**), which included a review of available geotechnical background information, a subsurface geotechnical evaluation of the project site, percolation testing, laboratory testing of select soil samples from the subsurface geotechnical evaluation, and site-specific liquefaction analyses.

4.6.4.1 Background Research and Data Review

GMU Engineers & Geologists reviewed previous exploratory efforts, including three previous reports from three different geotechnical firms as summarized below:

- **Petra Geotechnical, Inc. August 21, 2009.** This exploration was conducted within the existing Putuidem Village and the northern end of the project site and consisted of five hollow-stem auger borings drilled to a maximum depth of 43.5 feet bgs.

- **LGC Geotechnical, Inc. February 3, 2012**. This exploration consisted of shallow hand-auger borings drilled to a depth of two feet bgs and was performed to evaluate slope conditions at the existing dog park.

- **Diaz Yourman and Associates June 6, 2017.** This exploration was performed within the existing Putuidem Villages and consisted of five hand-auger borings, three percolation tests, and two CPT tests. These borings were drilled to a maximum depth of 22 feet bgs.

4.6.4.2 Field Investigation and Laboratory Testing

GMU Engineers & Geologists conducted a field investigation program to characterize the subsurface soils for the proposed improvements. A total of 13 hollow stem auger drill holes were performed within the project site to a maximum depth of 51.5 feet bgs. In addition, 6 cone penetration tests were performed in the central and central eastern portion of the project site near Trabuco Creek. Shear wave velocity tests were also performed at three of these locations. Eleven test pits were excavated with a rubber-tired backhoe to depths of 4 to 9 feet. Percolation testing was performed at the six cone penetration test locations.

Laboratory testing was performed on samples collected from the exploratory drill holes during the subsurface investigation. The testing on soil samples included the following:

- In-situ moisture and density;
- Expansion index;
- Maximum density and optimum moisture;
- Particle size distribution;
- Atterberg limits;
- Consolidation;
- R-value;
- Direct shear tests; and
- Corrosion (pH, resistivity, chlorides, soluble sulfates).

Agronomic testing was also performed on four samples in order to meet the requirements for the Agronomic Soils Report. GMU Engineers & Geologists staff collected these samples, which were tested at Wallace Laboratories, LLC. Laboratory procedures and the results of the laboratory testing are summarized in Appendix B to the Geotechnical Investigation and the Agronomic Testing report is included as Appendix G to the Geotechnical Investigation (see **Appendix H** to this Draft EIR).

4.6.4.3 Paleontological Resources

Project plans, geologic maps of the project site, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from those or similar geologic units elsewhere in the region. In addition, a search for known fossil localities was conducted through the Natural History Museum of Los Angeles County (NHMLAC) to determine the status and extent of previously recorded paleontological resources within and surrounding the project site.

4.6.5 Thresholds of Significance

The thresholds for geology and soils impacts used in this analysis are derived from Appendix G to the *State CEQA Guidelines*. The proposed project may be deemed to have a significant impact with respect to geology and soils if it would:

Threshold 4.6.1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of known fault? (Refer to Division of Mines and Geology Special Publication 42) (ii) Strong seismic ground shaking? (iii) Seismic-related ground failure, including liquefaction? (iv) Landslides;

Threshold 4.6.2: Result in substantial soil erosion or the loss of topsoil;

Threshold 4.6.3: 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-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse;

Threshold 4.6.4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property;

Threshold 4.6.5: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or

Threshold 4.6.6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.6.6 Project Impacts

As discussed in Section 3.7 of the Initial Study (**Appendix B**), the project site is not located within the boundaries of an identified Earthquake Fault Zone for fault rupture hazard as defined by the Alquist-Priolo Earthquake Fault Zoning Act of 1972 and due to the distance between the project site and the nearest active fault, the potential for ground rupture at the project site is considered low. Therefore, no impact related to fault rupture would occur (Threshold 4.6.1(i)). In addition, due to the project site's relatively flat topography, the absence of significant nearby slopes or hills in the area planned

for development, and because the project site is not within an area identified as having potential for landslides, no impact from landslides at the project site would occur (Threshold 4.6.1(iv)). The proposed project would connect to existing wastewater collection and conveyance facilities in the surrounding area. Therefore, the use of septic tanks would not be necessary (Threshold 4.6.5).Therefore, these topics are not discussed further in this Draft EIR.

Threshold 4.6.1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

(ii) Strong seismic ground shaking?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: The project site is located within a seismically active area, where earthquakes have the potential to produce very strong seismically related ground shaking during the anticipated operational life of the proposed project. As provided above, the nearest known active fault is the San Joaquin Hills blind thrust fault, which is located approximately 5.1 miles from the project site and is capable of generating a 7.1 Mw earthquake. The project site is also located within 6.3 miles of the Newport Inglewood fault, which is capable of generating a 7.5 Mw earthquake.

The level of ground motion at a given site resulting from an earthquake is a function of several factors including earthquake magnitude, type of faulting, rupture propagation path, distance from the epicenter, earthquake depth, duration of shaking, site topography, and site geology. All future construction and development on the project site would comply with applicable provisions of the CBC and the City's building regulations in effect at the time when building permit applications are submitted. In addition, as provided in **Mitigation Measure GEO-1** and required by the City**,** the proposed project would implement project-specific design and construction recommendations detailed in the Geotechnical Investigation. Proper engineering design and construction in compliance with the CBC standards and the recommendations in the Geotechnical Investigation (**Appendix H**) would address potential impacts related to seismic ground shaking.

Mitigation Measure GEO-1

California Building Code and Geotechnical Recommendations. Prior to the approval of any grading and/or building permits, the Applicant shall provide evidence to the City of San Juan Capistrano for review and approval that on-site structures, features, and facilities have been designed and will be constructed in conformance with applicable provisions of the California Building Code in effect at the time of City review and the recommendations cited in the project-specific Geotechnical Investigation. This measure shall be implemented to the satisfaction of the Director of the City of San Juan Capistrano Department of Development Services, Building Division, or designee.

Compliance with the applicable provisions of the CBC and the City's building regulations and implementation of **Mitigation Measure GEO-1**, which requires implementation of the project-specific design and construction recommendations detailed in the Geotechnical Investigation, would ensure that impacts associated with strong seismic ground shaking would be **less than significant with mitigation incorporated**.

(iii) Seismic-related ground failure, including liquefaction?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: Liquefaction is a phenomenon that occurs when strong seismic ground shaking causes soils to collapse from a sudden loss of cohesion and undergo a transformation from a solid to a liquefied state. There are three basic factors that must exist concurrently in order for liquefaction to occur:

- A source of ground shaking, such as an earthquake, capable of generating soil mass distortions;
- A relatively loose silty and/or sandy soil; and
- A relatively shallow groundwater table (within approximately 50 feet bgs) or completely saturated soil conditions that would allow positive pore pressure generation.

According to the Department of Conservation, the project site is located within a liquefaction zone and is potentially susceptible to liquefaction.[19] In addition, several areas of the project site in the vicinity of Trabuco Creek contain saturated alluvium and may be potentially liquefiable based on soil type, groundwater levels, and regional seismicity. Therefore, the Geotechnical Investigation included an earthquake-induced liquefaction analysis. The results of the liquefaction analysis indicate that portions of the alluvial deposits remaining in place below the design groundwater table are susceptible to liquefaction during seismic events. These liquefiable layers vary in thickness, ranging from a few inches up to approximately three feet. Under seismic loading, these layers are expected to experience a reduction in cyclic shear strength, which may lead to post-liquefaction ground deformations and seismic settlement, including lateral spreading and vertical settlement, as discussed further under Threshold 4.6.3, below.

In addition, as discussed under Threshold 4.6.3, below, the results of the lateral spread analysis indicated that if not remediated, lateral spread would likely impact the proposed pedestrian bridge and proposed Community Building within the Community Building Core. An additional slope stability analysis was performed, and the Geotechnical Investigation determined that the potential for post-earthquake lateral deformations/lateral spreading to significantly impact proposed development adjacent to Trabuco Creek is considered high. Accordingly, the Geotechnical Investigation determined that, for planning purposes, all structures proposed within the area of recent alluvial deposits on both sides of Trabuco Creek would be subject to significant lateral spreading

[19] California Department of Conservation. n.d.-a. California Geological Survey, Earthquake Zones of Required Investigation. <https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/#data_s=id%3AdataSource_4-191d8e4b825-layer-21%3A1163> (accessed July 2025).

deformations and that proposed structures located within the terrace deposits west of Trabuco Creek would likely not require significant lateral spreading related mitigation.

In order to address potential liquefaction and post-liquefaction ground deformations and seismic settlement impacts, the Geotechnical Investigation recommended potential remediation options for the proposed pedestrian bridge foundations and Community Building. For the proposed pedestrian bridge footings, the Geotechnical Investigation recommends installing piles extending to bedrock (i.e., roughly 40 to 50 feet bgs) that have sufficient lateral load capacity and stiffness to resist lateral spreading forces, moving the western abutment west (away from the creek face), and remedial grading of the slope face in the form of stability keyways. For the proposed Community Building, the Geotechnical Investigation recommended including mat foundations and/or piles and remedial grading of the slope face in the form of stability keyways. As discussed above, **Mitigation Measure GEO-1** requires the proposed project to implement the project-specific design and construction recommendations detailed in the Geotechnical Investigation. The recommendations detailed in the Geotechnical Investigation that address potential liquefaction and post-liquefaction impacts would be incorporated into proposed project design. With proper engineering design and construction in conformance with the CBC standards and Geotechnical Investigation, potential impacts related to seismic-related ground failure, including liquefaction, would be **less than significant with mitigation incorporated**.

Threshold 4.6.2: Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects:

Construction. Construction at the project site would disturb surface soils and make them susceptible to erosion from wind and water. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed in Section 4.9, Hydrology and Water Quality, and as specified in **Regulatory Compliance Measure HYD-1**, the Applicant would be required to obtain coverage under the Nation Pollution Discharge Elimination System (NPDES) Program's Construction General Permit, which requires preparation of a Storm Water Pollution Prevention Plan (SWPPP). In addition, as specified in **Regulatory Compliance Measure HYD-2,** and as required by the City's Municipal Code, a pollution control plan, construction Best Management Practices (BMPs) plan, and/or erosion and sediment control plan would be prepared and submitted to the City's Building Official prior to issuance of a grading or building permit. The SWPPP and pollution control plan, construction BMP plan, and/or erosion and sediment control plan would detail Erosion Control and Sediment Control BMPs to be implemented during construction to minimize erosion and retain sediment on site. Compliance with the requirements of the Construction General Permit and the City's Municipal Code, including implementation of construction BMPs, construction impacts related to substantial soil erosion or the loss of topsoil would be **less than significant**, and no mitigation is required.

Operation. Implementation of the proposed project would increase the amount of impervious surface area on the project site. An increase in impervious surface area increases the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters.

Because there would be no exposed soil in areas covered with impervious surfaces, portions of the project site would not be prone to erosion. The remaining areas of the project site with pervious surfaces would be maintained in a manner similar to existing conditions or landscaped with vegetation that would stabilize the soil and promote infiltration, thereby minimizing on-site erosion and siltation. Furthermore, as discussed in Section 4.9, Hydrology and Water Quality, the proposed project would be required to adhere to **Regulatory Compliance Measure HYD-3** and implement **Mitigation Measure HYD-1. Regulatory Compliance Measure HYD-3** requires the preparation of a Final Water Quality Management Plan (WQMP) in compliance with the Phase I Regional Municipal Separate Storm Dewer System (MS4) Program (Regional MS4 Permit) and the implementation of Site Design, Source Control, and Low Impact Development (LID) BMPs that minimize stormwater runoff thereby minimizing on-site erosion and siltation, and **Mitigation Measure HYD-1** requires the implementation of equestrian-related BMPs that would help minimize erosion impacts.

Mitigation Measure HYD-1 requires the implementation of equestrian-related BMPs that would help minimize erosion impacts, operational impacts related to substantial soil erosion or the loss of topsoil would be **less than significant with mitigation incorporated**.

Overall, with adherence to **Regulatory Compliance Measure**s **HYD-1** through **HYD-3** and implementation of **Mitigation Measure HYD-1**, potential impacts related to soil erosion or loss of topsoil with implementation of the proposed project would be **less than significant with mitigation incorporated**.

Threshold 4.6.3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: As previously discussed, due to the project site's relatively flat topography, the absence of significant nearby slopes or hills in the area planned for development, and because the project site is not within an area identified as having potential for landslides, no impacts related to on- or off-site landslides would occur. In addition, the Geotechnical Investigation determined that the potential for subsidence is considered negligible across the entire project site.

As discussed under Threshold 4.6.1(iii), the project site is located within a liquefaction zone and is potentially susceptible to liquefaction.[20] In addition, several areas of the project site in the vicinity of Trabuco Creek contain saturated alluvium and may be potentially liquefiable based on soil type, groundwater levels, and regional seismicity. The results of the liquefaction analyses performed as part of the Geotechnical Investigation indicated that portions of the alluvial deposits remaining in place below the design groundwater table are susceptible to liquefaction during seismic events. These liquefiable layers vary in thickness, ranging from a few inches up to approximately three feet.

[20] California Department of Conservation. n.d.-a. California Geological Survey, Earthquake Zones of Required Investigation. <https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/#data_s=id%3AdataSource_4-191d8e4b825-layer-21%3A1163> (accessed July 2025).

Under seismic loading, these layers are expected to experience a reduction in cyclic shear strength, which may lead to post-liquefaction ground deformations and seismic settlement, including lateral spreading and vertical settlement.

Specifically, within the Community Building Core on the east side of Trabuco Creek near the proposed pedestrian bridge, total and differential earthquake-induced settlements are expected to be 2.1-inch and 1.5-inch, respectively. West of Trabuco Creek near the proposed pedestrian bridge, total and differential earthquake-induced settlements are expected to be 2.9-inch and 2.5-inch, respectively. On the west side of Trabuco Creek within the terrace deposits, the total and differential earthquake-induced settlements are expected to be 1- inch and 0.7-inch, respectively. The results of the lateral spread analysis indicated that if not remediated, lateral spread would likely impact the proposed pedestrian bridge and proposed Community Building within the Community Building Core.

An additional slope stability analysis was completed for the proposed project. The results of the slope stability analysis indicated that after a seismic event and resulting strength loss of liquefied deposits, the static safety factors could be reduced to below 1.0, indicating unstable conditions and a high potential for alluvial flow failures near the banks of the Trabuco Creek (i.e., within the alluvial deposits). Accordingly, the Geotechnical Investigation determined that there is a high potential for post-earthquake lateral deformations/lateral spreading to significantly impact proposed development areas adjacent to the creek. Based on the current conceptual site plan, this would appear to primarily impact the proposed pedestrian bridge and proposed Community Building within the Community Building Core. The Geotechnical Investigation determined that, for planning purposes, all structures proposed within the area of recent alluvial deposits on both sides of Trabuco Creek would be subject to significant lateral spreading deformations and that proposed structures located within the terrace deposits west of Trabuco Creek would likely not require significant lateral spreading related mitigation.

In order to address potential liquefaction and post-liquefaction ground deformations and seismic settlement impacts, the Geotechnical Investigation recommended potential remediation options for the proposed pedestrian bridge foundations and Community Building. For the proposed pedestrian bridge footings, the Geotechnical Investigation recommended installing piles extending to bedrock (i.e., roughly 40 to 50 feet bgs) that have sufficient lateral load capacity and stiffness to resist lateral spreading forces, moving the western abutment west (away from the creek face), and remedial grading of the slope face in the form of stability keyways. For the proposed Community Building, the Geotechnical Investigation recommended including mat foundations and/or piles and remedial grading of the slope face in the form of stability keyways.

As discussed above, **Mitigation Measure GEO-1** requires the proposed project to implement the project-specific design and construction recommendations detailed in the Geotechnical Investigation. Accordingly, the recommendations detailed in the Geotechnical Investigation, including those that address potential liquefaction and post-liquefaction impacts, would be incorporated into proposed project design. With proper engineering design and construction in conformance with the CBC standards and the recommendations in the Geotechnical Investigation, potential impacts related to on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse would be **less than significant with mitigation incorporated**.

Threshold 4.6.4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: According to the Geotechnical Investigation, the terrace deposits (Qt) located west of Trabuco Creek are anticipated to be granular with very low to low expansion potential. However, based on expansion index testing of subsurface soils, the on-site soils east of Trabuco Creek (i.e., Community Building Core) have a medium to high expansion potential.

As previously discussed, all future construction and development on the project site would comply with applicable provisions of the CBC and the City's building regulations in effect at the time when building permit applications are submitted. In addition, as provided in **Mitigation Measure GEO-1** and required by the City**,** the proposed project would be required to implement the project-specific design and construction recommendations detailed in the Geotechnical Investigation. Specifically, the Geotechnical Investigation recommends that the artificial fills and alluvial soils present in the upper several feet of the Community Building Core be removed and recompacted in order to provide uniform soils characteristics, foundation slab, pavement, and flatwork for the proposed Community Building. Proper engineering design and construction in conformance with the CBC standards and Geotechnical Investigation would address potential impacts related to seismic ground shaking. Therefore, compliance with applicable provisions of the CBC and the City's building regulations and implementation of **Mitigation Measure GEO-1** would ensure that impacts related to being located on expansive soil would be **less than significant with mitigation incorporated**.

Threshold 4.6.6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant With Mitigation Incorporated.

As previously discussed, project plans, geologic maps of the project site, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from those or similar geologic units elsewhere in the region. In addition, a search for known fossil localities was conducted through the Natural History Museum of Los Angeles County (NHMLAC) to determine the status and extent of previously recorded paleontological resources within and surrounding the project site.

Based on the results of the fossil locality search and database review, no paleontological resources or unique geologic features are known to exist within the project site. However, excavation into the Young Axial Channel Deposits below a depth of 10 feet would impact sediments with high paleontological sensitivity. Any excavation into these deposits has the potential to impact scientifically significant paleontological resources. Excavation at the project site during construction of the proposed project is anticipated to extend to a maximum depth of 10 feet bgs. To ensure that potential impacts to undiscovered paleontological resources remain less than significant, the proposed project would be required to implement **Mitigation Measure PAL-1**, requiring development of a Paleontological Resources Impact Mitigation Program (PRIMP) by a paleontologist,

and **Mitigation Measure PAL-2,** requiring excavation and grading activities in deposits with high paleontological sensitivity be monitored by a qualified paleontological monitor.

Mitigation Measure PAL-1

A paleontologist, listed on the 2025 Orange County Certified Paleontologist list, shall be retained by the applicant to develop a Paleontological Resources Impact Mitigation Program (PRIMP) for this project. The PRIMP shall reviewed by the Development Services Director and approved as being consistent with the guidelines of the Society of Vertebrate Paleontology and shall include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading.

Mitigation Measure PAL-2

Excavation and grading activities in deposits with high paleontological sensitivity (i.e., Young Axial Channel Deposits below a depth of 10 feet) shall be monitored by a paleontological monitor, listed on the 2025 Orange County Certified Paleontologist list, following a PRIMP. No monitoring is required for excavations in deposits with no or low paleontological sensitivity (i.e., Artificial Fill or Young Axial Channel Deposit above a depth of 10 feet). If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and a paleontologist should be contacted to assess the find for significance. If determined to be significant, the fossil shall be collected from the field.

Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. At the conclusion of the monitoring program, a report of findings shall be prepared to document the

results of the monitoring program. This report shall be submitted to the City and the designated museum repository for final review and record-keeping.

With implementation of **Mitigation Measures PAL-1 and PAL-2**, the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Impacts would be **less than significant with mitigation incorporated**.

4.6.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for geology and soils. For geology and soils, the cumulative study area consists of the area that could be affected by proposed project activities and the areas affected by other projects whose activities could directly or indirectly affect the geology and soils of the project site. Typically, cumulative geology and soils impacts are specific to a particular site and there is little, if any, cumulative relationship between the development of a proposed project and development within a larger cumulative area. Moreover, although seismic conditions are regional in nature, seismic impacts on a given project site are site-specific. For example, implementation of the proposed project would not alter geologic events or soil features/characteristics (such as ground shaking, seismic intensity, or soil expansion or compression). Therefore, the proposed project would not affect the level of intensity at which a seismic event on an adjacent site is experienced.

Compliance with the CBC, the City's building regulations in effect at the time when building permit applications are submitted, and implementation of the recommendations provided in the Geotechnical Investigation (as required by **Mitigation Measure GEO-1**) would also minimize other geologic hazards, such as liquefaction and post-liquefaction ground deformations and seismic settlement (including lateral spreading and vertical settlement) and expansive soils within the project site. Implementation of a SWPPP would minimize topsoil erosion by ensuring BMPs are implemented during project construction. In addition, the proposed project would result in an increase in impervious surface area on the project site, which would generally reduce the potential for soil erosion during project operation. Furthermore, the proposed project would be required to prepare a Final WQMP in compliance with the Regional MS4 Permit and implement Site Design, Source Control, and LID BMPs that minimize stormwater runoff thereby minimizing on-site erosion and siltation.

Further, implementation of **Mitigation Measures PAL-1 and PAL-2** would ensure that construction associated with implementation of the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Overall, the proposed project and all reasonably foreseeable projects within the city, including the projects provided in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures, would be required to comply with the applicable State and local requirements, including the CBC and the City's building regulations in effect at the time when building permit applications

are submitted. In addition, all reasonably foreseeable projects within the city would be required to perform a site-specific paleontological resource assessment to determine if potential impacts to a unique paleontological resource or site or unique geologic feature would occur and prescribed mitigation, similar to **Mitigation Measures PAL-1 and PAL-2**, to reduce potential impacts. Therefore, the cumulative impacts of the proposed project and the cumulative projects related to geology and soils would be **less than cumulatively considerable**.

4.6.8 Level of Significance Prior to Mitigation

Impacts related to geology and soils would be potentially significant without implementation of mitigation.

4.6.9 Regulatory Compliance Measures and Mitigation Measures

4.6.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are applicable to the proposed project.

Regulatory Compliance Measure HYD-1	**Construction General Permit.** (Refer to Section 4.9, Hydrology and Water Quality.)
Regulatory Compliance Measure HYD-2	**Erosion and Sediment Control Plans.** (Refer to Section 4.9, Hydrology and Water Quality.)
Regulatory Compliance Measure HYD-3	**Water Quality Management Plan.** (Refer to Section 4.9, Hydrology and Water Quality.)

4.6.9.2 Mitigation Measures

The proposed project would be required to implement the following mitigation measures.

Mitigation Measure GEO-1	**California Building Code and Geotechnical Recommendations.** Prior to the approval of any grading and/or building permits, the Applicant shall provide evidence to the City of San Juan Capistrano for review and approval that on-site structures, features, and facilities have been designed and will be constructed in conformance with applicable provisions of the California Building Code in effect at the time of City review and the recommendations cited in the project-specific Geotechnical Investigation. This measure shall be implemented to the satisfaction of the Director of the City of San Juan Capistrano Department of Development Services, Building Division, or designee.

Mitigation Measure PAL-1

A paleontologist, listed on the 2025 Orange County Certified Paleontologist list, shall be retained by the applicant to develop a Paleontological Resources Impact Mitigation Program (PRIMP) for this project. The PRIMP shall reviewed by the Development Services Director and approved as being consistent with the guidelines of the Society of Vertebrate Paleontology and shall include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading.

Mitigation Measure PAL-2

Excavation and grading activities in deposits with high paleontological sensitivity (i.e., Young Axial Channel Deposits below a depth of 10 feet) shall be monitored by a paleontological monitor, listed on the 2025 Orange County Certified Paleontologist list, following a PRIMP. No monitoring is required for excavations in deposits with no or low paleontological sensitivity (i.e., Artificial Fill or Young Axial Channel Deposit above a depth of 10 feet). If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and a paleontologist should be contacted to assess the find for significance. If determined to be significant, the fossil shall be collected from the field.

Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. At the conclusion of the monitoring program, a report of findings shall be prepared to document the results of the monitoring program. This report shall be submitted to the City and the designated

museum repository for final review and record-keeping.

Mitigation Measure HYD-1 **Equestrian-Related Water Quality Best Management Practices (BMPs).** (Refer to Section 4.9, Hydrology and Water Quality.)

4.6.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to geology and soils with implementation of **Mitigation Measures GEO-1, HYD-1, PAL-1,** and **PAL-2**.

4.7 GREENHOUSE GAS EMISSIONS

This section describes existing greenhouse gas (GHG) emissions and discusses global climate change, its causes, and the contribution of human activities. This section also discusses potential GHG impacts that would result from implementation of the proposed Legacy Ranch Project (proposed project), including vehicular traffic, energy consumption, and other emission sources. The analysis in this section was prepared in compliance with the South Coast Air Quality Management District's (SCAQMD) California Environmental Quality Act (CEQA) guidance documents.[1]

4.7.1 Scoping Process

The City of San Juan Capistrano (City) received no comments concerning the proposed project's potential impacts related to GHG emissions during the scoping period for this Draft Environmental Impact Report (EIR). In addition, no comments pertaining to GHG emissions were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** to this Draft EIR.

4.7.2 Existing Environmental Setting

4.7.2.1 Background

Global Climate Change. Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. Global surface temperature was around 1.1 degrees Celsius (°C) above 1850–1900 in 2011–2020. The prevailing scientific consensus on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide (CO_2) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.[2]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- CO_2
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)

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1 South Coast Air Quality Management District (SCAQMD). 1993. *Air Quality Handbook*. <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)> (accessed February 2026).

2 The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the heat escaping, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the naturally occurring greenhouse effect is necessary to keep the planet at a comfortable temperature.

- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs (e.g., CO_2, methane, and N_2O), some gases (e.g., HFCs, PFCs, and SF_6) are completely new to the atmosphere.

Certain gases (e.g., water vapor) are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this air quality analysis, the term "GHGs" will refer collectively to the six gases listed above.

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to carbon dioxide, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalents (CO_2e). For example, SF_6 is 23,900 times more potent at contributing to global warming than CO_2. **Table 4.7.A: Global Warming Potential of Greenhouse Gases** shows the GWP for each type of GHG.

The following discussion summarizes the characteristics of the six GHGs and black carbon.

> ***Carbon Dioxide.*** In the atmosphere, carbon generally exists in its oxidized form, as CO_2. Natural sources of CO_2 include the respiration (i.e., breathing) of humans, animals and plants, volcanic out gassing, decomposition of organic matter, and evaporation from the oceans. Human-caused sources of CO_2 include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural sources release approximately 150 billion tons of CO_2 each year, far outweighing the seven billion tons of manmade CO_2 emissions each year. Nevertheless, natural removal processes (e.g., photosynthesis by land- and ocean-dwelling plant species) cannot keep pace with this extra input of manmade CO_2, and consequently, the gas is building up in the atmosphere.

Table 4.7.A: Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-Year Time Horizon)
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	310
HFC-23	270	11,700
HFC-134a	14	140
HFC-152a	1.4	140
PFC: Tetrafluoromethane (CF_4)	50,000	6,500
PFC: Hexafluoroethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: *Second Update to the Climate Change Scoping Plan: Building on the Framework* (CARB 2017). <www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents> (accessed February 2025).
CARB = California Air Resources Board
HFC = hydrofluorocarbon
PFC = perfluorocarbon

Methane. CH_4 is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites,[3] and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH_4 emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH_4 in California. Total annual emissions of CH_4 accounted for approximately 9.8 percent of GHG emissions in California in 2022.[4]

Nitrous Oxide. N_2O is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N_2O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N_2O emissions in California. Nitrous oxide emissions accounted for approximately 3.4 percent of GHG emissions in California in 2022.[5]

3 Termites are important decomposers of plant material. During digestion, microbes in their guts break down the plant material, producing methane.

4 California Air Resources Board (CARB). 2024. Assembly Bill 32 Greenhouse Gas Emissions Inventory for 2000-2022 – by Gas.

5 Ibid.

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.[6] PFCs and SF_6 are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs. HFCs, PFCs, and SF_6 accounted for about 5.7 percent of GHG emissions in California in 2022.[7]

Black Carbon. Black carbon is the most light absorbent component of particulate matter (PM) formed by burning fossil fuels such as coal, diesel, and biomass. Black carbon is emitted directly into the atmosphere in the form of $PM_{2.5}$ and is the most effective form of PM, by mass, at absorbing solar energy. Per unit of mass in the atmosphere, black carbon can absorb one million times more energy than CO_2.[8] Black carbon contributes to climate change both directly, such as absorbing sunlight, and indirectly, such as affecting cloud formation. However, because black carbon is short-lived in the atmosphere, it can be difficult to quantify its effect on global warming.

Most United States emissions of black carbon come from mobile sources (52 percent), particularly from diesel-fueled vehicles. The other major source of black carbon is open biomass burning, including wildfires, although residential heating and industry also contribute. The California Air Resources Board (CARB) estimates that the annual black carbon emissions in California will be reduced approximately 50 percent below 2013 levels by 2030.[9]

Greenhouse Gas Inventories. A Greenhouse Gas Inventory is an emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs and is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, and California GHG emissions inventories.

Global Emissions. Worldwide emissions of GHGs in 2021, the latest inventory year available, totaled 19.2 billion metric tons (MT) of CO_2e. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change.[10]

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6 The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

7 California Air Resources Board (CARB). 2024. Assembly Bill 32 Greenhouse Gas Emissions Inventory for 2000-2022 – by Gas.

8 United States Environmental Protection Agency (USEPA). 2015. Black Carbon, Basic Information. February 14, 2017. <19january2017snapshot.epa.gov/www3/airquality/blackcarbon/basic.html> (accessed February 2026).

9 California Air Resources Board (CARB). 2017b. *Short-Lived Climate Pollutant Reduction Strategy.* March. <https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf> (accessed February 2026).

10 United Nations Framework Convention on Climate Change (UNFCCC). 2023. GHG Data from UNFCCC. <unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc> (accessed February 2026).

United States Emissions. In 2022, the year for which the most recent data are available, the United States emitted about 6,343 million metric tons (MMT) of CO_2e. Overall, emissions in 2022 increased by one percent relative to the 2021 total GHG emissions. This increase in total GHG emissions was driven by fossil fuel combustion due primarily to increased energy use and in part to the continued rebound in economic activity after the height of the COVID-19 pandemic. However, GHG emissions in 2022 were 17 percent below those of 2005 levels. Of the five major sectors—residential and commercial, agricultural, industry, transportation, and electricity generation—transportation accounted for the highest amount of GHG emissions in 2022 (approximately 28 percent), with electricity generation second at 25 percent and emissions from industry third at 23 percent.[11]

State of California Emissions. The State emitted approximately 360.4 MMT CO_2e emissions in 2023, 11.2 MMT CO_2e lower than 2022 levels.[12] CARB estimates that transportation was the source of approximately 38 percent of the State's GHG emissions in 2023. The next largest sources included industrial sources at approximately 22 percent and electricity generation at 16 percent. The remaining sources of GHG emissions were residential activities at 10 percent, agriculture at eight percent, and commercial activities at seven percent.[13]

4.7.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to GHG emissions that are relevant to the proposed project.

4.7.3.1 Federal Policies and Regulations

Federal Clean Air Act. The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the United States Environmental Protection Agency (USEPA) has the authority to regulate CO_2 emissions under the federal Clean Air Act (CCA). The USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change. This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the federal Clean Air Act, finding that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards. In February 2026, the USEPA rescinded the 2009 Greenhouse Gas Endangerment Finding and all GHG emission standards from new highway vehicles and engines. Accordingly, there are currently no adopted federal regulations for the control or reduction of GHG emissions.

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11 USEPA. 2023. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks> (accessed February 2026).

12 California Air Resources Board (CARB). 2025. *California Greenhouse Gas Emissions for 2000 to 2023, Trends of Emissions and Other Indicators Report*. November 4. <https://ww2.arb.ca.gov/sites/default/files/2025-11/nc-2000_2023_ghg_inventory_trends.pdf> (accessed February 2026).

13 Ibid.

4.7.3.2 State Policies and Regulations

Assembly Bill 1493 (2002), Pavley Standards. In a response to the transportation sector's significant contribution to California's CO_2 emissions, AB 1493 was signed into law by Governor Gray Davis on July 22, 2002. AB 1493 requires the CARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. These standards (starting in model years 2009 to 2016) were approved by the CARB in 2004, but the needed waiver of Clean Air Act Preemption was not granted by the USEPA until June 30, 2009. CARB responded by amending its original regulation, now referred to as Low Emission Vehicle III, to take effect for model years starting in 2017 to 2025. The Trump administration revoked California's waiver in 2019, but the Biden administration restored California's waiver in 2021.

Executive Order S-3-05 (2005). Governor Arnold Schwarzenegger issued Executive Order (EO) S-3-05 on June 1, 2005, which proclaimed that California is vulnerable to the impacts of climate change. To address those concerns, the EO established California's GHG emissions reduction targets, which established the following 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 percent below 1990 levels by 2050.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State Legislature on August 31, 2006, and signed into law by Governor Arnold Schwarzenegger. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 MMT of CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The CARB approved the Scoping Plan on December 11, 2008, which contains the main strategies California will implement to achieve the reduction goals and includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory.

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use.

CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[14] to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32.

The 2022 Scoping Plan[15] was approved in December 2022 and assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Executive Order B-30-15 (2015). Governor Jerry Brown issued EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, which Governor Jerry Brown signed on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent
- Increasing energy efficiency in buildings by 50 percent by the year 2030

[14] California Air Resources Board (CARB). 2017a. *California's 2017 Climate Change Scoping Plan*. November.
[15] California Air Resources Board (CARB). 2022. *2022 Scoping Plan*. November 16. <https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf> (accessed February 2026).

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission for the private utilities and by the California Energy Commission (CEC) for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved using existing energy efficiency retrofit funding and regulatory tools already available to state energy agencies under existing law. The addition made by this legislation requires state energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016 the Legislature passed, and Governor Jerry Brown signed SB 32, and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emission reductions target of at least 40 percent below 1990 levels by 2030 found in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps the State on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change (IPCC) analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Jerry Brown signed SB 100, which raises California's Renewables Portfolio Standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, issued by Governor Jerry Brown on September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other state-wide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279. AB 1279 was signed into law by Governor Gavin Newsom in September 2022 and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant State agencies to achieve these goals.

California Building Efficiency Standards (Title 24, Part 6). The California Building Standards Code, or Title 24 of the California Code of Regulations (CCR) contains the regulations that govern the construction of buildings in California. Within the Building Standards Code, two parts pertain to the incorporation of both energy efficient and green building elements into land use development. Part 6 is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. In November 2008, the California Building Standards Commission established the California Green Building Standards Code, Title 24, Part 11 (CALGreen Code), which sets performance standards for residential and non-residential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The current standards (2025 CALGreen Code) were adopted in 2025 and apply to projects seeking building permits on or after January 1, 2026.

Executive Order N-79-20. EO N-79-20, which Governor Gavin Newsom issued on September 23, 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks shall be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and 100 percent of off-road vehicles and equipment in the State shall be zero-emission by 2035, where feasible.

Low Carbon Fuel Standard and Advanced Clean Cars. EO S-01-07, issued by Governor Arnold Schwarzenegger on January 18, 2007, established a low carbon fuel standard (LCFS) with a Statewide goal to be established to reduce the carbon intensity of California's transportation fuels that applies to all refiners, blenders, producers, or importers ("Providers") of transportation fuels in California, including fuels used by off-road construction equipment. CARB approved amendments in 2018 to readjust carbon intensity benchmarks to meet California's 2030 GHG reductions targets under SB 32. These amendments include opportunities to promote zero emission vehicle (ZEV) adoption, carbon capture and sequestration, and advanced technologies for decarbonization of the transportation sector. The Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of ZEVs, into a single package of regulatory EO B-48-18. In January 2018, Governor Jerry Brown signed EO B-48-18, requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to

expand ZEV infrastructure at residential land uses, through the LCFS Program, and recommend how to ensure affordability and accessibility for all drivers.

4.7.3.3 Regional Regulations

South Coast Air Quality Management District. In 2008, the South Coast Air Quality Management District (SCAQMD or South Coast AQMD) formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the South Coast Air Basin (Basin). The Working Group developed several different options that are contained in the South Coast AQMD 2008 draft guidance document titled *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*[16] that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting No. 15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where the South Coast AQMD is not the lead agency. The South Coast AQMD has not presented a finalized version of these thresholds to the governing board.

The South Coast AQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, the South Coast AQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the year 2020 and post-2020 emissions targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State will be able to accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and future post-2020 targets.

Southern California Association of Governments. On April 4, 2024, Southern California Association of Governments (SCAG) adopted the 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal).[17] In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled (VMT) from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at eight percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. Connect SoCal lays out a strategy for the region to meet these targets. Overall, Connect SoCal is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.[18] However, local General Plans, Specific Plans, or zoning are not

[16] South Coast Air Quality Management District (SCAQMD). 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.

[17] Southern California Association of Governments (SCAG). 2024. Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. <https://scag.ca.gov/connect-socal> (accessed February 2026).

[18] Ibid.

required to be consistent with Connect SoCal; SCAG is required to consider local land use controls when drafting the RTP/SCS.

4.7.3.4 Location Regulations

City of San Juan Capistrano General Plan. The Environmental Justice and Public Services and Utilities Elements of the City's General Plan contain the following goals and implementing policies related to GHG emissions that would be applicable to the proposed project:

- **Environmental Justice Goal 2:** Proactively take actions to address potential negative impacts of climate change on the most vulnerable residents and adopt strategies to mitigate impacts and promote adaptation and resiliency for residents in the Community of Focus.
    - **Policy 2.1:** Incorporate climate change and climate variability into planning, health, and emergency preparedness plans and guidance to increase preparedness for natural hazards exacerbated by climate change, especially among vulnerable populations.

4.7.4 Methodology

Construction activities would generate emissions from off-road construction equipment, and on roadways as a result of construction-related truck hauling, vendor deliveries, and worker commutes. Operational GHG emissions are typically associated with mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). This analysis uses the California Emissions Estimator Model (CalEEMod) version 2022.1 to quantify GHG emissions for both construction and operation activities associated with the proposed project. CalEEMod output is contained in **Appendix C.**

Consistent with Section 4.2, Air Quality, the following methodology was used to quantify GHG emissions.

Construction Emissions. Construction of all proposed project phases is anticipated to be completed over approximately three years, beginning within three years of the certification of the EIR (i.e., 2029). Therefore, to provide a conservative estimate of the emissions that could occur due to construction activities, this analysis assumes that project construction will begin in mid-2029 and be operational in 2032. This represents a conservative analysis as proposed construction activities that occur at a later point in time would likely produce decreased emissions due to ongoing technological advances that trend towards increased efficiency and reduced energy consumption. Furthermore, this analysis assumes the project would be constructed in a single phase, resulting in a more compressed construction timeframe. This approach is conservative because it concentrates construction activities, increasing the potential for higher peak daily emissions compared to the assumption of a more phased or extended construction schedule.

The proposed project would include the demolition of the existing 1,600-square-foot barn in the Community Building Core, which was included in CalEEMod. In addition, the proposed project would be balanced on-site, and no import or export of soil is anticipated. During construction, the

proposed project would disturb approximately 25 acres, which was included in CalEEMod. This analysis assumes the use of Tier 3 equipment and that the proposed project would comply with SCAQMD Rule 403: Fugitive Dust measures (SCAQMD Rule 403 is defined in Section 4.2.3.3). All other construction details are not yet known; therefore, default assumptions (e.g., construction equipment, worker and truck trips and fleet activities) from CalEEMod were used.

The default assumptions applied in CalEEMod are derived from representative, industry-standard construction practices and are generally considered conservative because they are intended to be broadly applicable across a range of project types and conditions. In particular, default equipment inventories and usage factors tend to reflect typical or upper-bound activity levels, and default worker and vendor trip assumptions may overestimate actual trip generation where project-specific efficiencies (e.g., ride-sharing, local labor pools, or optimized delivery schedules) could occur. As a result, the use of CalEEMod default values reasonably approximate construction-related emissions in the absence of more detailed project-specific data.

Operational Emissions. CalEEMod was used to calculate the long-term operational emissions associated with the project. The proposed project would develop the Legacy Ranch within the Northwest Open Space (NWOS) Specific Plan Area. The Legacy Ranch would consist of several different land uses arranged in seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, while preserving the existing uses on site including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village. Each core is described in more detail in Chapter 3.0, Project Description, of this Draft EIR.

The proposed project analysis was conducted using the following land uses:[19] *Place of Worship, Single Family Housing, High Turnover (Sit Down Restaurant), Medical Office Building, Arena, General Office Building, Parking Lot, Other Non-Asphalt Surfaces,* and *City Park*. Because CalEEMod does not include land use types specific to horse barns, veterinary barns, amenities buildings, or agricultural and event barns, and because the model does not allow for specialization of the land use types included in the model, alternative land use types were selected to ensure conservative emissions estimates. The amenities/ catering building was modeled using the *High Turnover (Sit-Down Restaurant)* category, which represents higher-intensity energy and equipment use relative to the proposed use. Similarly, *Medical Office Building* and *General Office Building* land use types were applied to represent the horse barn, veterinary barn, and agricultural event barn. These land uses were determined to best match the land uses proposed under the proposed project. Further, these land use types are more intensive in terms of internal building energy use, conditioned space, lighting, ventilation, and plug loads than the agricultural and livestock-related structures included in the project, which would have substantially lower energy demands and more limited occupancy. Lastly, the roping and warm up arenas were modeled using the Arena land use category. Therefore, the use of these higher-intensity land use types provides a conservative basis for estimating

[19] For purposes of analyzing greenhouse gas emissions, CalEEMod (Version 2022.1) incorporates 79 land uses from the Institute of Traffic Engineers (ITE) *Trip Generation Manual,* (10th Edition, 2017). These land uses are similar to but vary from the land uses employed for purposes of evaluating transportation impacts, which utilizes the most recent version of the ITE *Trip Generation Manual* (12th Edition, 2025) and allows for a wider number of land uses for consideration in the analysis.

operational emissions and ensures that project-related air quality impacts are not underestimated. Additionally, the proposed equestrian facility would be sized to host a variety of equestrian events and would have the capacity to stable up to 149 horses. Up to 29 roping cattle could be accommodated in place of 29 horses. Because cattle are a known source of methane emissions, which contribute to overall GHG emissions, a conservative approach was applied by quantifying emissions associated with beef cattle and converting them to carbon dioxide equivalents (CO_2e).[20] Emissions from horses were not quantified because they generate relatively low GHG emissions that would not meaningfully affect the overall estimate.

Furthermore, CalEEMod assumes natural gas usage by default. However, natural gas consumption for the proposed project would be limited to the commercial kitchen. Therefore, consistent with the project design plans, this analysis adjusts the model inputs so that natural gas usage is only attributed to the commercial kitchen use associated with the Ranch House and agricultural catering building. In addition, the CalEEMod analysis assumes that the proposed project would be operational in 2032. Trip generation rates used in CalEEMod for the project were based on the project's trip generation described in Section 4.11, Transportation, which identifies that the proposed project would generate approximately 1,149 average daily trips[21]. To maintain internal consistency, the modeled trip rates in CalEEMod were scaled to match the project-specific trip generation identified in Section 4.11.

4.7.5 Thresholds of Significance

The thresholds for impacts related to greenhouse gas emissions used in this analysis are consistent with Appendix G of the State Guidelines for the Implementation of CEQA of 1970 (*State CEQA Guidelines*). The proposed project may be deemed to have a significant impact with respect to greenhouse gas emissions if it would:

Threshold 4.7.1: Generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment; or

Threshold 4.7.2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.7.5.1 Regional Emissions Thresholds

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). The last Working Group meeting was held in September 2010 (Meeting No. 15). At that

[20] Based on EPA estimates, a single cow produces between 154 to 264 pounds of methane gas per year. Therefore, 29 cows have the potential to produce 7,656 pounds per year of methane (29 x 264 lbs/year = 7,656 lbs/year). This would be the equivalent of 97.2 MT CO_2e (7,656 lbs/year x 28 GWP/2,205 = 97.2 MT CO_2e)

[21] This analysis evaluated project emissions based on a trip generation rate of 1,149 average daily trips (ADT). The project's trip generation has since been refined to 1,104 ADT. This revised trip generation was reviewed by LSA and determined to result in lower overall emissions and, therefore, would not generate more severe GHG impacts than those described in this analysis. As such, the use of the higher trip generation in this analysis represents a conservative assumption.

meeting, SCAQMD proposed to adopt the following tiered approach. While the approach has never been formally adopted, SCAQMD uses this approach for evaluating GHG emissions from development projects where SCAQMD is not the lead agency. In practice, other lead agencies have used the SCAQMD tiered approach, or components thereof, as a reasonable and informative benchmark for evaluating GHG emissions under CEQA. The use of this approach as an analogous screening tool has been upheld by California courts. For example, in *Upland Community First v. City of Upland* (2024) 105 Cal.App.5th 1, the Court of Appeal recognized the use of such thresholds and methodologies as appropriate tools to inform a lead agency's determination of significance:

- **Tier 1—Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2—Consistency with a Locally Adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3—Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are considered to be less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. For the analysis of stationary/industrial projects, the SCAQMD adopted a threshold of 10,000 MT of CO_2e per year (MT CO_2e/yr). The proposed project is not a stationary source project and therefore, the 10,000 MT CO_2e/year threshold is not applicable. For all other land use types, the SCAQMD recommends utilizing one of two options to analyze the impact of a project's GHG emissions. Under Option 1, the SCAQMD applies a "bright-line" screening-level threshold of 3,000 metric tons (MT) of CO_2e (or MT CO_2e) per year (MT CO_2e/year) for all land use types. Under Option 2, the SCAQMD applies a "bright-line" screening level threshold based on specific land use types as follows: 1,400 MT CO_2e for commercial projects; 3,500 MT CO_2e for residential projects; or 3,000 MT CO_2e for mixed-use projects. This "bright-line" threshold is based on a review of the Office of Planning and Research (OPR)[22] database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the "bright-line" thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions.

As the lead agency for the proposed project, the City follows the SCAQMD tiered approach as the appropriate analytical framework to inform its determination of significance for GHG emissions in this Draft EIR. The City's use of this methodology is supported by its widespread application in CEQA practice, its consistency with state guidance, and case law recognizing the appropriateness of relying on such thresholds and screening tools.

[22] As of July 1, 2024, the Office of Planning and Research (OPR) was renamed the Governor's Office of Land Use and Climate Innovation (LCI).

For the purpose of this analysis, the proposed project will be compared to the SCAQMD threshold of 3,000 MT CO_2e/year for all land use types. The project is also evaluated for compliance with the 2022 Scoping Plan and Connect SoCal.

4.7.6 Project Impacts

Threshold 4.7.1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment?

Less Than Significant Impact.

Discussion of Effects: This section describes the proposed project's construction- and operational-related GHG emissions and contribution to global climate change. The SCAQMD has not addressed emission thresholds for construction in its *CEQA Air Quality Handbook*; however, the SCAQMD requires quantification and disclosure. Thus, an evaluation of the proposed project's impacts related to the release of GHG emissions for both construction and operational phases of the project is described below.

Short-Term Greenhouse Gas Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, the SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. The SCAQMD then requires the construction GHG emissions to be amortized over the life of the project, defined by the SCAQMD as 30 years,[23] added to the operational emissions, and compared to the applicable interim GHG significance threshold tier.

Using CalEEMod, it is estimated that the proposed project would generate approximately 1,528 MT CO_2e during construction of the project. When amortized over the 30-year life of the project, annual emissions would be 50.9 MT CO_2e.

Long-Term Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption (e.g., off-site

[23] The SCAQMD has identified the average operational lifespan of buildings to be 30 years. SCAQMD. 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf> (accessed February 2026).

utility providers), waste sources (e.g., land filling and waste disposal), and water sources (e.g., water supply and conveyance, treatment, and distribution).

Mobile-source GHG emissions would include project-generated vehicle trips to and from the project site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers because of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Table 4.7.B: Greenhouse Gas Emissions, shows the calculated GHG emissions for the proposed project.

Table 4.7.B: Greenhouse Gas Emissions

Emissions Source	Operational Emissions (MT/yr)			
	CO_2	CH_4	N_2O	CO_2e
Mobile Sources	1,077.0	<0.1	<0.1	1,092.0
Area Sources	6.0	<0.1	<0.1	6.1
Energy Sources	504.9	<0.1	<0.1	506.6
Water Sources	84.8	0.4	<0.1	98.5
Waste Sources	61.25	6.1	0.0	214.3
Refrigerants	0.0	0.0	0.0	2.5
Cattle	0.0	0.0	0.0	97.2
Total Project Operational Emissions				**1,920.0**
Amortized Construction Emissions				50.9
Total Project Emissions				**2,068.1**
SCAQMD Threshold				3,000
Exceed?				**No**

Source: Compiled by LSA (May 2026).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

As discussed above, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000 MT CO_2e/yr. Based on the analysis results, the proposed project would result in estimated emissions of 2,068.1 MT CO_2e/yr, which would not exceed the SCAQMD threshold of 3,000 MT CO_2e/yr. Therefore, operation of the proposed project would not have the potential to generate significant GHG emissions that would have a significant effect on the environment. As such, impacts would be **less than significant** and no mitigation is required.

Threshold 4.7.2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant with Mitigation Incorporated.

Discussion of Effects: An evaluation of the proposed project's consistency with the 2022 Scoping Plan, EO B-30-15, SB 32, AB 197, and AB 1279, and Connect SoCal is provided below.

2022 Scoping Plan. The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan (including EO B-30-15, SB 32, AB 197, and AB 1279).

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[24] to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving its 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016. AB 1279 codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities. The 2022 Scoping Plan contains the GHG reduction targets embedded in EO B-30-15, SB 32, AB 197, and AB 1279. Thus, compliance with the Scoping Plan would also result in compliance with EO B-30-15, SB 32, AB 197, and AB 1279. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

> ***Energy Efficiency.*** Energy efficiency measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As identified above, the proposed project would be required to comply with the latest Title 24 and CALGreen Code standards regarding energy conservation requirements. The elimination of natural gas in new development would help projects implement their "fair share" of achieving long-term 2045 carbon neutrality consistent with State goals. As such, if a project does not utilize natural gas, a lead agency can

[24] California Air Resources Board (CARB). 2017a. *California's 2017 Climate Change Scoping Plan*. November.

conclude that it would be consistent with achieving the 2045 neutrality goal and will not have a cumulative considerable impact on climate change.[25] Natural gas consumption for the proposed project would be limited to the commercial kitchen. Further, the proposed project will be constructed with the latest Title 24 building design and will meet all required energy efficiency measures. Therefore, the proposed project would comply with applicable energy efficiency measures.

Water Conservation. Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the proposed project would be required to comply with the latest Title 24 and CALGreen Code standards, which include a variety of different measures, including reduction of wastewater and water use. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

Transportation Measures. The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. As described in Section 4.11, Transportation, the proposed project VMT would exceed the City's VMT threshold (Target VMT Rate) by a small margin (0.03 percent), resulting in a significant VMT impact. **Mitigation Measure TRA-1** requires implementation of VMT reduction measures, including providing end-of-trip bicycle facilities and/or providing pedestrian network improvements. According to the CAPCOA Handbook, these measures could provide up to 4 to 6.4 percent maximum reduction in VMT. . Because the project's net VMT increase is minimal (435.44 VMT, or 0.03 percent), implementing one or a combination of these measures would reduce VMT below the City's threshold, resulting in a less than significant impact. The project would also support alternative transportation through EV charging stations and would not conflict with transportation or motor vehicle measures. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

As demonstrated above, with incorporation of **Mitigation Measure TRA-1**, the proposed project would not conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs, including the 2022 Scoping Plan. This would result in a less **than significant impact with mitigation incorporated**.

Regional Transportation Plan/Sustainable Communities Strategy. SCAG's 2024–2050 RTP/SCS (Connect SoCal) identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in Connect SoCal is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create

[25] Bay Area Air Quality Management District. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans.* April. <https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-b-thresholds-for-evaluating-significance-of-climate-impacts_final-pdf> (accessed February 2026).

complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit oriented communities. Connect SoCal contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal, would reach the GHG emissions reduction target set by CARB, including the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels). Local General Plans, Specific Plans, and zoning are not required to be consistent with Connect SoCal but there are incentives to governments and developers for implementing projects that are consistent with Connect SoCal.

The objectives of Connect SoCal are to create a region with: transit as a backbone of the transportation system; more Complete Streets where people and safety are prioritized; policies that encourage emerging technologies and mobility innovations that support rather than hamper regional goals; more housing, jobs, and mobility options closer together in Priority Development Areas to preserve natural lands and open spaces; more housing to address the existing housing need as defined by the Regional Housing Needs Assessment (RHNA); safe and fluid movement of goods, with a commitment to the broad deployment of zero- and near-zero emission technologies. Implementing Connect SoCal will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets.

The proposed project would develop the Legacy Ranch, which would consist of several different land uses arranged in seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, while preserving the existing uses on site including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village. Each core is described in more detail in Chapter 3.0, Project Description.

According to the growth forecast prepared in conjunction with Connect SoCal, the City's households and employment are forecasted to increase by approximately 2,800 households and 9,500 jobs, respectively, between 2019 and 2050.[26] The City's General Plan does not identify a specific buildout date, and development timing is dependent on market conditions and property owner initiative. Operation of the proposed project would generate approximately 60 full-time jobs, with additional part-time employment opportunities associated with future events at the project site. However, it is unlikely that these jobs would incite substantial population growth as these new jobs are anticipated to be filled by local residents or residents in the surrounding communities. In addition, the proposed project would include permanent equestrian caretaker residences. The equestrian caretakers in residence would be anticipated to come from the surrounding area, and would not result in a significant increase in population within the city or the region.

[26] Southern California Association of Governments (SCAG). 2024. 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy. Demographics and Growth Forecast, Technical Report, Table 13. Adopted April 4, 2024.

Based on the employment growth forecast prepared for Connect SoCal, the proposed project's 60-full time jobs would represent less than one percent[27] of the job growth anticipated in San Juan Capistrano by 2050. As such, the proposed project would not increase population growth forecasts and is not expected to alter SCAG's demographic projections; therefore, the proposed project is already reflected in Connect SoCal and would not interfere with SCAG's ability to achieve the region's GHG reduction target of 19 percent below 2005 per capita emissions levels by 2035. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206 and as such, it would not conflict with the Connect SoCal targets since those targets were established and are applicable on a regional level. Impacts related to consistency with Connect SoCal **would be less than significant**, and no mitigation is required.

Conclusion. With implementation of **Mitigation Measure TRA-1**, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 Scoping Plan and Connect SoCal and would be consistent with applicable State plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. This impact would be **less than significant with mitigation incorporated**.

4.7.7 Cumulative Impacts

GHG impacts are by their nature cumulative impacts. Localized impacts of climate change are the result of the cumulative impact of global emissions. The combined benefits of reductions achieved by all levels of government help to slow or reverse the growth in GHG emissions. In the absence of comprehensive international agreements on appropriate levels of reductions achieved by each country, another measure of cumulative contribution is required. This serves to define the State's share of the reductions regardless of the activities or lack of activities of other areas of the U.S. or the world. Therefore, a cumulative threshold based on consistency with State targets and actions to reduce GHGs is an appropriate standard of comparison for significance determinations.

The thresholds developed by the SCAQMD are based on and apply to individual projects. Since climate change is a global issue, it is unlikely that individual projects would generate enough GHG emissions to influence climate change on their own. Consequently, it is speculative to determine how an individual project's GHG emissions would impact climate change in California. As such, impacts identified in this Greenhouse Gas Emissions section are not project-specific impacts to global climate change but are the proposed project's contribution to this cumulative impact. The proposed project's emissions would be less than the SCAQMD threshold of 3,000 MT CO_2e per year; therefore, environmental impacts related to GHG emissions and global climate change would not be cumulatively considerable under CEQA.

As identified under Threshold 4.7.2, with implementation of **Mitigation Measure TRA-1,** the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 Scoping Plan and the 2024–2050 RTC/SCS and would be consistent with applicable State plans and programs designed to reduce GHG emissions.

[27] LSA. 2025. *Initial Study for the Northwest Open Space Legacy Ranch Project, San Juan Capistrano, California – Section 3.14, Population and Housing*. November.

Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The cumulative impacts of the proposed project and the cumulative projects related to GHG emissions would be **less than cumulatively considerable.**

4.7.8 Level of Significance Prior to Mitigation

Impacts related to GHG emissions would be potentially significant without implementation of mitigation.

4.7.9 Regulatory Compliance Measures and Mitigation Measures

4.7.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.7.9.2 Mitigation Measures

The proposed project would be required to implement the following mitigation measures.

Mitigation Measure TRA-1 **Transportation Demand Management.** (Refer to Section 4.11, Transportation.)

4.7.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to GHG emissions with implementation of **Mitigation Measure TRA-1**.

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4.8 HAZARDS AND HAZARDOUS MATERIALS

This section provides an overview of potential hazards and hazardous materials within and in the vicinity of the project site and assesses potential impacts to public health and safety and the environment that could result from implementation of the proposed Legacy Ranch Project (proposed project). The information in this section is based, in part, on the *Phase I Environmental Site Assessment Report 29943, 29991, 30091, 30261, and 30291 Camino Capistrano, San Juan Capistrano, California 92675* (Phase I ESA)[1] (**Appendix I**) prepared for the project site by Earth Science, LLC and dated July 11, 2025, and the *Phase II Environmental Site Assessment Report 29943-30291 Camino Capistrano*, *San Juan Capistrano, California 92675* (Phase II ESA)[2] (**Appendix J**) prepared for the project site by Earth Science, LLC and dated October 22, 2025.

4.8.1 Scoping Process

The City of San Juan Capistrano (City) received no comments during the scoping period for this Draft Environmental Impact Report (EIR) (November 13 through December 15, 2025) concerning the proposed project's potential impacts related to hazards and hazardous materials. In addition, no comments pertaining to hazards and hazardous materials were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** to this Draft EIR.

4.8.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan area in San Juan Capistrano, Orange County. The project site is bounded by single- family residential uses to the north, Camino Capistrano to the east, a senior living residential community (The Groves Apartments) to the south, and an Orange County Transportation Authority (OCTA)-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route.

The irregularly shaped project site is currently developed with the historic Roger Y. Williams/ Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site and there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site.

Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano with Oso Creek located to the west. In addition, an unnamed tributary to Trabuco Creek (Tributary 1) is located on the eastern portion of the project site, south of the existing barn and associated storage containers. Another concrete lined tributary (Tributary 2) to Trabuco Creek, lies further to the south on the project site. Approximately 14 acres of the project site, encompassing Trabuco Creek and its banks, are protected by conservation covenants. Vegetation includes grasses, shrubs,

[1] Earth Science, LLC. 2025. *Phase I Environmental Site Assessment Report 29943, 29991, 30091, 30261, and 30291 Camino Capistrano, San Juan Capistrano, California 92675*. July 11.

[2] Earth Science, LLC. 2025. *Phase II Environmental Site Assessment Report 29943-30291 Camino Capistrano*, *San Juan Capistrano, California 92675.* October 21.

and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek.

4.8.2.1 Project Site History

According to the Phase I ESA and based on available historical information, the project site consisted of undeveloped land from at least 1902 up to 1920. In 1923, the project site was developed with the Swanner House and the associated citrus orchard. The project site remained in this condition until at least 2000. In 1992, the project site was purchased by the City. From at least 2002 up to the present day, the project site has been used as a public open space/parkland.

According to 1992 and 1993 permit records from the City of San Juan Capistrano Development Services Department, Building Division, two 250-gallon underground storage tanks (USTs) containing gasoline, an aboveground storage tank (AST) containing diesel, an AST containing herbicide, and approximately 150 cubic yards of diesel and waste oil contaminated soil were previously located in the vicinity of the present-day barn located in eastern portion of the project site. Additionally, the permit records indicated that historic soil testing was performed at the project site, including 15 borings to terminal depths ranging from 5.0 to 40 feet, and diesel contamination was encountered in the subsurface of the project site. The documentation included in the permit records indicated that a final report would be prepared for clean certification as required by the regulatory agency. A note on the permit record states “Final Removal” dated May 18, 1993; however, no UST closure report (typically prepared following the removal of USTs) is available for the project site.

The Phase I ESA noted that a 55-gallon steel drum containing unknown material was located in the eastern portion of the project site, near the existing barn. Although there was no evidence of a hazardous materials release or staining near the 55-gallon steel drum, some surface rust was observed on the drum surface and, due to the weight of the drum, the drum could not be lifted to inspect the soils underlying the drum. However, the City retained the services of Enviro-Guard (U.S. EPA ID CAR000075424) and their subcontractor Industrial Waste Utilization (U.S. EPA ID CAD980585293) to assess and remove the 55-gallon steel drum. They assessed the drum to be Non-RCRA Hazardous Waste Liquid (Solventless Degreaser) and subsequently removed it from the site.

In addition, records from the Orange County Health Care Agency (OCHCA), Environmental Health Division indicated that OCHCA conducted a tank removal inspection on September 17, 1992, at the project site; however, the OCHCA stated that it does not have any tank removal records; sampling records; tank, dispenser, or piping location information; or disposal records.

According to the State Water Resources Control Board’s (SWRCB) GeoTracker database records, an inactive City groundwater production well is located at the project site. Testing of the groundwater production well performed from 2001 to 2024 indicated the presence of various contaminants, including emerging contaminants such as per- and polyfluoroalkyl substances (PFAS) at concentrations exceeding the regulatory agency notification and response levels.

The project site is also listed in the California Department of Resources Recycling and Recovery’s (CalRecycle) Solid Waste Information System (SWIS) database under the facility name of Earthco Arbor Care. The Earthco Arbor Care facility is a closed green material composting facility that was

formerly located at the project site. According to CalRecycle's SWIS database, there are no enforcement actions or violations listed for the project site.

The project site is also listed in the South Coast Air Quality Management District's (SCAQMD) Facility INformation Detail (F.I.N.D.) database under the facility name of North Open Space Well – San Juan Capistrano pertaining to a permit to operate a diesel-powered electrical generator associated with one of the water wells located at the project site. According to SCAQMD's F.I.N.D. database, there are notices of violations or notices to comply listed for the project site.

Finally, the Phase I ESA indicated that asbestos-containing materials (ACMs) may be present in the existing structures on the project site that were constructed prior to 1980 and that lead-based paints (LBPs) may be present in the existing structures on the project site that were constructed prior to 1978. These existing structures include the Swanner House and the existing barn located on the eastern portion of the project site. In addition, evidence of concrete delamination was observed on the concrete pillars of the railroad bridge located in the southwestern portion of the project site, which included concrete surface debris on the unpaved surfaces of the project site. Some of the concrete debris appeared to be painted and may contain LBPs.

4.8.3 Regulatory Setting

Hazards and hazardous materials are subject to numerous federal, State, and local laws and regulations intended to protect health, safety, and the environment. The United States Environmental Protection Agency (USEPA), the California Environmental Protection Agency (CalEPA), the California Department of Toxic Substances Control (DTSC), the San Diego Regional Water Quality Control Board (RWQCB), and the County of Orange are the primary agencies responsible for enforcing these regulations. Local regulatory agencies enforce many federal and State regulations through the Certified Unified Program Agency (CUPA) program.

The following describes the federal, State and local regulations and policies related to hazards and hazardous materials that are relevant to the proposed project.

4.8.3.1 Federal Policies and Regulations

Occupational Safety and Health Administration (OSHA), Title 29 Code of Federal Regulations (CFR). OSHA is the federal agency responsible for ensuring worker safety and enforces regulations from Title 29 CFR. These regulations provide standards for safe workplaces and work practices, including those relating to hazardous materials handling.

United States Environmental Protection Agency (USEPA), Title 40 CFR 700–799 (Toxic Substances Control Act). The Toxic Substances Control Act regulates manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. It addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls, asbestos-containing materials, and lead-based paint.

United States Department of Transportation (USDOT) Regulations, Title 49 CFR. USDOT, in conjunction with the USEPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials. The Code of

Federal Regulations (CFR) 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) (42 United States Code [USC] § 9601 et seq.). The purpose of CERCLA, often referred to as "Superfund," is to identify and clean up abandoned contaminated sites so that public health and welfare are not compromised. CERCLA provides a Federal "Superfund" to clean up such sites. The law also imposes liability on parties responsible for, in whole or in part, the presence of hazardous substances at a site.

Resource Conservation and Recovery Act of 1976 (RCRA) 42 USC § 6901 et seq.). The RCRA provides for "cradle-to-grave" regulation of hazardous waste generated by operating entities. This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also establishes a framework for the management of non-hazardous solid wastes.

Clean Water Act – National Pollutant Discharge Elimination System (Clean Water Act § 402[p]) (33 USC § 1342[p]). Regulates discharges and spills of pollutants, including hazardous materials to surface waters and groundwater. The Clean Water Act (CWA) requires states to adopt water quality standards for water bodies and have those standards approved by the USEPA. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. Because California had not established a complete list of acceptable water quality criteria for toxic pollutants, USEPA Region IX established numeric water quality criteria for toxic constituents in the form of the California Toxics Rule (CTR).

Federal Air Regulations, 14 CFR, Part 77. The Federal Aviation Administration (FAA) is responsible for the review of construction activities that occur in the vicinity of airports. Its role in reviewing these activities is to ensure that new structures do not result in a hazard to aviation. The regulations in the Federal Air Regulations (14 CFR, Part 77) are designed to ensure that no obstructions in navigable air space are allowed to exist that would endanger the public. Federal Air Regulations Part 77 identifies the minimum height at which a structure would be considered an obstacle at any given point around an airport. The extent of the off-airport coverage that needs to be evaluated for tall structure impacts can extend miles from an airport facility. In addition, Federal Air Regulations Part 77 establishes standards for determining whether objects constructed near airports will be considered obstructions in navigable airspace, sets forth notice requirements of certain types of proposed construction or alterations, and provides for aeronautical studies to determine the potential impacts of a structure on the flight of aircraft through navigable airspace.

4.8.3.2 State Policies and Regulations

State Assembly Bill 2948. In response to the growing statewide concern of hazardous waste management, Assembly Bill (AB) 2948 (Tanner Act of 1986) enacted legislation authorizing local governments to develop comprehensive hazardous waste management plans. The intent of each

plan is to ensure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within its jurisdiction.

California State Hazard Mitigation Plan. The purpose of the State Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural and human-caused hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, State, and federal agencies as well as the private sector.

California Occupational Safety and Health Administration (Cal/OSHA) Regulations. Cal/OSHA is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many entities to prepare injury and illness prevention plans and chemical hygiene plans and provides specific regulations to limit exposure of construction workers to lead.

California Code of Regulations (CCR) Title 8. California standards for workers dealing with hazardous materials are contained in California Code of Regulations (CCR) Title 8 and include practices for all industries (General Industrial Safety Orders), as well as specific practices for construction. Workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations.[3] Additional regulations have been developed for construction workers potentially exposed to lead[4] and asbestos.[5]

Cortese List Statute (California Government Code, §65962.5). This statute requires the DTSC to compile and maintain lists of potentially contaminated sites throughout the State and includes the Hazardous Waste and Substances Sites List. The overall list is called the "Cortese" List.

Porter-Cologne Water Quality Control Act of 1970. The Clean Water Act places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs.

California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and the nine RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California's responsibility under the CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

3 California Code of Regulations, Title 8, Section 5192.
4 California Code of Regulations, Title 8, Section 1532.1.
5 California Code of Regulations, Title 8, Section 1529.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water plans and policies. The Porter-Cologne Act also provides that an RWQCB may include a regional plan with water discharge prohibitions applicable to conditions, areas, or types of waste particular to that region. The City, including the Project site, is within the jurisdictional boundaries of the Santa Ana RWQCB (Region 8).

Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code, §25249.5 et seq.). The Safe Drinking Water and Toxic Enforcement Act is similar to the Federal Safe Drinking Water Act and Clean Water Act in that it regulates the discharge of contaminants to sources of drinking water.

California Government Code 51178. This statute requires the State Fire Marshal to identify areas in the State as moderate, high, and very high fire hazard severity zones based on consistent statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas. Moderate, high, and very high fire hazard severity zones shall be based on fuel loading, slope, fire weather, and other relevant factors including areas where winds have been identified by the Office of the State Fire Marshal as a major cause of wildfire spread.

California Senate Bill 12. This legislation establishes new rules for the construction of industrial, commercial, and residential projects to improve fire safety and prevention. These regulations apply to building materials that are more fire-resistant and defensible space incorporated into the design of projects.

California Health and Safety Code, Division 20, Chapter 6.6 (Safe Drinking Water and Toxic Enforcement Act of 1986), § 25249.5 to § 25249.14 and Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory), Article 1, § 25500 to § 25519. Chapter 6.6, Safe Drinking Water and Toxic Enforcement Act of 1986 (codified version of Proposition 65), regulates the discharge of contaminants to groundwater. Chapter 6.95, Hazardous Materials Release Response Plans and Inventory, requires the establishment of business and area plans related to handling and release or threatened release of hazardous materials. Pursuant to California Health and Safety Code Section 25507, a business shall establish and implement a Hazardous Materials Business Plan (HMBP) for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503 if the business handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time above the thresholds described in Section 25507(a) (1) through (8). The HMBP aims to prevent or minimize harm to public health and safety and the environment from a release or threatened release of a hazardous material. This is accomplished by providing emergency responders with the necessary information to effectively protect the public. The California Environmental Protection Agency (CalEPA) oversees the implementation of the HMBP program at the state level. Certified Unified Program Agencies (CUPAs), and Participating Agencies (PAs), implement the program at the local level and are responsible for enforcement and administration in their respective jurisdictions.

4.8.3.3 Regional Regulations

Certified Unified Program Agency. SB 1082 provides for the designation of a Certified Unified Program Agency (CUPA) that would be responsible for the permitting process and collection of fees regarding hazardous materials. The CUPA would be responsible for implementing at the local level the Unified Program, which serves to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental and emergency management programs: Hazardous Waste; Hazardous Materials Business Plan; California Accidental Release Prevention Program; Underground Hazardous Materials Storage Tanks; Aboveground Petroleum Storage Tanks/Spill Prevention Control & Countermeasure Plans; and Hazardous Waste Generator and On-Site Hazardous Waste Treatment (tiered permitting) Programs.

The Environmental Health Division of the Orange County Health Care Agency (OCHCA) is designated as the CUPA for the City, and coordinates the regulation of hazardous materials and hazardous wastes in the City for construction and operational activities through the following programs:

- Aboveground Petroleum Storage Tank (APST)
- Business Emergency Plan (BEP)
- California Accidental Release Prevention (CalARP)
- Hazardous Materials Disclosure (HMD)
- Hazardous Waste (HW)
- Underground Storage Tank (UST)

The Orange County Fire Authority (OCFA) is the administering agency for the chemical inventory and business emergency plan regulations for the City. OCFA's disclosure activities are coordinated with the OCHCA. OCFA's Hazardous Materials Services Section (HMSS) is staffed with technical and administrative personnel who are assigned the implementation and management of the disclosure program.

County of Orange and OCFA Local Hazard Mitigation Plan (2021). This plan identifies risks and vulnerabilities, establishes hazard mitigation strategies, describes emergency organization, task assignments, and general procedures, and provides for coordination of response in the event of an emergency.

South Coast Air Quality Management District Rule 1403. Rule 1403, issued by the South Coast Air Quality Management District (SCAQMD), establishes mandatory work-practice standards to limit asbestos emissions during building demolition, renovation, and related activities where asbestos-containing materials (ACMs) may be disturbed. Rule 1403 also enforces the requirements for asbestos surveys, prior notification, safe removal, cleanup procedures, and proper disposal of asbestos-containing waste material (ACWM).

4.8.3.4 Location Regulations

City of San Juan Capistrano General Plan. The Safety Element of the City's General Plan contain the following goals and implementing policies related to hazards and hazardous materials that would be applicable to the proposed project:

- **Safety Goal 1:** Reduce the risk to the community from hazards related to geologic conditions, seismic activity, wildfires, flooding, and climate change.
    - **Policy 1.3:** Continue to enforce and, as needed, increase the weed abatement and Arundo removal program on an annual basis.
    - **Policy 1.4:** Require property owners to incorporate fire-safe and erosion-safe design during new development or major renovations (development over a two-year period of more than 33 percent of existing square footage or 2,000 square feet resulting in the building exceeding 5,000 square feet) and receive contracted emergency service agency's approval prior to permit issuance.
- **Safety Goal 2:** Protect the community from hazards related to air pollution, nuclear power production, hazardous materials, ground transportation, and health crises.
    - **Policy 2.2:** Work with the Orange County Sheriff's Department to ensure that no hazardous materials are dumped in any area of the City and increasing surveillance to enable enforcement on illegal dumping.
    - **Policy 2.3:** Cooperate with responsible federal, State, and County agencies to minimize the risk to the community from the use and transportation of hazardous materials through the City.

City of San Juan Capistrano Municipal Code. Building and construction in the city are subject to the regulations of the City's Municipal Code. The following provisions of the City's Municipal Code are related to hazards and hazardous materials:

- **Chapter 3, Solid Waste:** Chapter 3 of the City's Municipal Code regulates solid waste handling and disposal.
    - **Section 6-3.09** of the City's Municipal Code requires that all special solid waste and hazardous solid waste be stored and disposed of in accordance with all applicable laws.

4.8.4 Methodology

To assess the potential hazards and hazardous materials conditions at the Project site and in the surrounding area, Earth Science, LLC prepared a site-specific Phase I ESA (**Appendix I**) and Phase II ESA (**Appendix J**) for the project site.

4.8.4.1 Phase I ESA

The Phase I ESA included a search of available environmental records within up to a one-mile search radius that encompassed the project site. The Phase I ESA was prepared in accordance with Title 40 Code of Federal Regulations (CFR) Part 312 and the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-21) to identify, to the extent feasible, the presence of recognized environmental conditions (RECs), historical recognized environmental conditions (HREC), and

controlled recognized environmental conditions (CREC) with respect to the project site as defined in ASTM E1527-21.

According to the ASTM, an REC means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any 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.[6] An HREC means an environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently. If a past release of any hazardous substances or petroleum products has occurred in connection with the property, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a case closed letter or equivalent), this condition shall be considered an HREC. A CREC is a recognized environmental condition resulting from the past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (i.e., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

The Phase I ESA implements the following methodology:

Background Research and Data Review. Earth Science, LLC contacted various regulatory agencies in order to request information pertaining to any current and/or historic hazardous material usage, storage, and releases associated with the project site. Additionally, Earth Science, LLC researched publicly available information on the presence of environmental liens and activity and use limitations (AULs) from these agencies. All available regulatory records obtained for the project site were reviewed by Earth Science, LLC on July 11, 2025. Copies of select regulatory agency records are included in Appendix B of the Phase I ESA.

Earth Science, LLC also obtained an Environmental Radius Report (ERR) prepared by Nationwide Environmental Title Research, LLC (NETR) to identify potential RECs, HRECs, and CRECs within up to one mile of the project site. The ERR was compiled federal, State, and local agency environmental records from publicly available sources. Using the ASTM definition of migration, Earth Science, LLC considered the migration of hazardous substances or petroleum products in any form (including solid, liquid, and vapor) onto the project site during the evaluation of each site listed in the ERR. A copy of the ERR is included in Appendix C of the Phase I ESA.

A historical records review was also performed to identify the past uses of the project site and surrounding areas, as they may relate to the environmental condition of the project site.

Site Reconnaissance. On June 10, 2025, the project site was visually assessed for potential RECs, HRECs, and CRECs, including, but not limited to, potential underground storage tanks (USTs),

[6] The term "Recognized Environmental Conditions" is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

aboveground storage tanks (ASTs), polychlorinated biphenyl (PCB)-containing equipment, hazardous materials storage or handling areas, containerized or bulk wastes, and visual indications of impacted soil.

4.8.4.2 Phase II ESA

As recommended by the Phase I ESA, Earth Science LLC prepared a Phase II ESA for the project site in order to investigate the potential presence of chlorinated herbicides (CHs), organochlorine pesticides (OCPs), total petroleum hydrocarbons (TPH), and volatile organic compounds (VOCs) in the subsurface of the project site as a result of the former on-site agricultural operations. The Phase II ESA also assessed the potential for residual contamination to be present in the area of the former USTs at the project site.

The Phase II ESA implements the following methodology:

Geophysical Survey. On September 17, 2025, Subsurface Surveys & Associates, Inc. conducted a geophysical survey of the project site in order to locate potential USTs, backfilled excavation pits, underground utilities, and other pathways at the project site where significant releases may have occurred, and which may act as a conduit for contaminant migration. The geophysical survey was conducted using both ground penetrating radar (GPR) and electromagnetic equipment and the results of the geophysical survey were used to select the optimal boring locations for the investigation and to capture potential contaminated areas and potential contaminated vapor pathways.

The geophysical survey conducted at the project site located underground utilities and two significant subsurface anomalies, which included two backfilled excavation pits in the eastern portion of the project site in locations of the two USTs identified by the Phase I ESA.

Soil and Soil Gas Sampling and Analysis. On September 17, 2025, West End Environmental Sampling, Inc. advanced 10 borings at the project site in order to perform soil logging, screening, and sampling, and to install temporary soil gas sampling probes. Six, 1-foot-deep borings using a hand-operated hollow-stem auger (HSA) and two, 10-foot-deep borings and two, 25-foot-deep borings were drilled using a tracked-mounted, direct push Geoprobe 6610DT drill rig utilizing a dual-tube conductor casing.

Soil samples were continuously logged from grade down to the terminal depth in all 10 borings order to obtain information on the general project site lithology. All collected soil samples were visually inspected for discoloration, monitored for odors, classified in accordance with the Unified Soil Classification System, and field-screened for VOCs using a photo-ionization detector (PID) calibrated to isobutylene.

Following the completion of soil logging, screening, and sampling activities, temporary soil gas sampling probes were installed at the project site in four of the borings. Soil gas samples were collected in accordance with the *Advisory – Active Soil Gas Investigations, July 2015*, the *Public Draft Guidance for Screening and Evaluating Vapor Intrusion, February 2020*, and the *Final Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion, February 2023* prepared by the

California Department of Toxic Substances Control (DTSC). Each temporary soil gas monitoring probe was allowed to equilibrate for at least two hours after installation prior to collecting the samples. A total of 10 soil gas samples were collected from the 10 temporary soil gas sampling probes installed at the project site. In addition to the 10 collected soil gas samples, one duplicate soil gas sample was collected for quality assurance and quality control (QA/QC) purposes and one equipment blank sample, consisting of an assembled blank probe, tip, and tubing was also sampled.

The collected soil samples were delivered to SunStar Laboratories, Inc. on September 17, 2025. The 12 soil samples collected from the project site were analyzed as follows:

- The six soil samples collected from the six, 1-foot-deep borings (located in the orchard areas) were analyzed for OCPs in accordance with United States Environmental Protection Agency (USEPA) Method 8081A.

- Two soils samples from the 1-foot-deep borings (located in the vicinity of a former AST containing herbicides) were analyzed for CHs in accordance with USEPA Method 8151A.

- Two soil samples from the two, 10-foot-deep borings (in the vicinity of a former AST containing diesel and in areas reported to contain diesel- and waste oil contaminated soils) and two soil samples from the two, 25-foot-deep borings (in the vicinity of two former USTs containing gasoline) were analyzed for TPH as diesel-,gasoline-, and motor oil- range organics (DRO/GRO/MORO) in accordance with USEPA Method 8015B and for VOCs in accordance with USEPA Method 8260B.

Soil gas samples were also collected and analyzed via a mobile laboratory operated by BAS. A total of 11 soil gas samples (consisting of 10 samples and one duplicate sample) collected from the temporary soil gas monitoring probes installed at the project site were prepared for laboratory analysis. All soil gas samples were analyzed for VOCs in accordance with USEPA Method 8260B.

4.8.5 Thresholds of Significance

The thresholds for impacts related to hazards and hazardous materials used in this analysis are consistent with Appendix G of the State Guidelines for the Implementation of CEQA of 1970 (*State CEQA Guidelines*). The proposed project may be deemed to have a significant impact with respect to hazards and hazardous materials if it would:

Threshold 4.8.1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

Threshold 4.8.2: 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 4.8.3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

Threshold 4.8.4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment;

Threshold 4.8.5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;

Threshold 4.8.6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

Threshold 4.8.7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.8.6 Project Impacts

As discussed in Section 3.9 of the Initial Study (**Appendix B**), compliance with all applicable federal, State, local, and manufacturer regulations would ensure that the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (Threshold 4.8.1). In addition, although the project site is within 0.25 mile of an existing school, hazardous materials at the project site would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable federal, State, and local regulations and any associated risk would be less than significant through compliance with these standards and regulations (Threshold 4.8.3). The proposed project would also not result in a safety hazard due to the proximity of an airport for people residing or working in the project area as the project site is located outside the Airport Compatibility Zones of the nearest airport (Threshold 4.8.5). Lastly, the proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan (Threshold 4.8.6) or expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires (Threshold 4.8.7). Therefore, these topics are not discussed further in this Draft EIR.

Threshold 4.8.2: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant with Mitigation Incorporated.

Discussion of Effects: There are two primary ways that the public and/or the environment could be affected by the release of hazardous materials from the project site, including: (1) exposing workers and/or the public to potentially contaminated soil and groundwater during construction and/or operation of the project; or (2) exposing workers and/or the public to hazardous building materials (e.g., lead paint, asbestos) during demolition of existing structures.

As described above, small quantities of common hazardous materials would be used at the project site during construction and operation of the proposed project. Improper use, storage, or handling

could result in the release of hazardous materials into the environment which could pose a risk to construction workers and the public. However, the proposed project would be required to comply with existing government regulations in the use and disposal of these materials, and such materials would not be used in sufficient strength or quantity to create a substantial risk to human or environmental health.

A Phase I ESA (**Appendix I**) was prepared for the project site in accordance with the standards and procedures outlined in the ASTM E 1527-21. The Phase I ESA included a review of official government databases concerning the locations of known hazardous materials releases for the purpose of identifying any listings suggesting a potential impact to the project site and proposed project due to presence or migration of hazardous substances. The report included a search of standard environmental record sources for listings of the project site, including permit records from the City of San Juan Capistrano Development Services Department, Building Division; Orange County Health Care Agency (OCHCA), Environmental Health Division; State Water Resources Control Board (SWRCB) GeoTracker database; California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Information System (SWIS) database; and SCAQMD's Facility INformation Detail (F.I.N.D.) database for the purposes of identifying recognized environmental conditions associated with the project site.

"Recognized environmental condition" means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any 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. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

The Phase I ESA identified three recognized environmental conditions (RECs) in connection with the project site, as discussed below.

According to 1992 to 1993 permit records from the City's Development Services Department, Building Division, two 250-gallon underground storage tanks (USTs) containing gasoline, an aboveground storage tank (AST) containing diesel, an AST containing herbicide, and approximately 150 cubic yards of diesel and waste oil contaminated soil were previously located in the vicinity of the present-day barn located in eastern portion of the project site. Additionally, the permit records indicated that historic soil testing was performed at the project site, including 15 borings to terminal depths ranging from 5 to 40 feet bgs, and diesel contamination was encountered in the subsurface of the project site. The documentation included in the permit records indicated that a final report would be prepared for clean certification as required by the regulatory agency and a note on the permit record states "Final Removal" dated May 18, 1993; however, no UST closure report is available for the project site. The Phase I ESA concluded that the lack of documentation confirming that the former USTs were removed from the project site, that confirmatory soil sampling from the base pits and sidewalls of the excavations were performed following the UST removals, and that all dispenser piping and contaminated soils were properly removed from the project site and disposed of at appropriate off-site facilities represents an REC associated with the project site.

The project site was also used for agricultural purposes from at least 1923 up to at least 2000 and was part of a large orchard. The potential storage and use of hazardous substances (including herbicides and pesticides) associated with the former agricultural operations conducted at the project site represents a REC associated with the project site.

In addition, the project site is listed in the SWRCB's GeoTracker database as a Public Drinking Water Well site. According to the SWRCB's GeoTracker database records, an inactive City groundwater production well is located at the project site. Testing of the groundwater production well performed from 2001 to 2024 indicated the presence of various contaminants, including emerging contaminants such as per- and polyfluoroalkyl substances (PFAS) at concentrations exceeding the regulatory agency notification and response levels. The Phase I ESA concluded that the presence of contamination in the inactive groundwater production well represents a REC associated with the project site.

The Phase I ESA also identified three environmental issues at the project site, as discussed below. An "environmental issue" refers to environmental concerns do not qualify as RECs; however, require further discussion and consideration.

A 55-gallon steel drum containing unknown material was identified in the eastern portion of the project site, near a barn. Although there was no evidence of a hazardous materials release or staining near the 55-gallon steel drum, some surface rust was observed on the drum surface and, due to the weight of the drum, the drum could not be lifted to inspect the soils underlying the drum. The Phase I ESA determined that the 55-gallon steel drum containing unknown material and exhibiting evidence of surface rust represents an environmental issue. In response to the Phase I ESA, the City retained the services of Enviro-Guard (U.S. EPA ID CAR000075424) and their subcontractor Industrial Waste Utilization (U.S. EPA ID CAD980585293) to assess and remove the 55-gallon steel drum. They assessed the drum to be Non-RCRA Hazardous Waste Liquid (Solventless Degreaser) and removed it from the site.

In addition, the Phase I ESA indicated that asbestos-containing materials (ACMs) may be present in the existing structures on the project site that were constructed prior to 1980 and that lead-based paints (LBPs) may be present in the existing structures on the project site that were constructed prior to 1978. These existing structures include the Swanner House and the existing barn located on the eastern portion of the project site. Although the Swanner House would be retained, the existing barn would be demolished for construction of the community building in the Community Building Core. In addition, evidence of concrete delamination was observed on the concrete pillars of the railroad bridge located in the southwestern portion of the project site, which included concrete surface debris on the unpaved surfaces of the project site. Some of the concrete debris appeared to be painted and may contain LBPs. The potential presence of ACMs and LBPs on an existing structure to be demolished was determined to represent environmental issues.

Based on the identification of three RECs and three environmental issues associated with the project site, the Phase I ESA recommended a Phase II ESA be performed in order to assess the potential for residual contamination to be present in the area of the former USTs at the project site. The Phase I ESA also recommended that the Phase II ESA include a ground-penetrating radar (GPR) survey in order to confirm that all USTs and other subsurface structures associated with the former USTs have

been removed. The Phase I ESA also included other recommendations, including sampling the shallow soils near the former herbicide AST and the orchard areas at the project site in order to identify any potential presence of hazardous substances associate with the former agricultural operations; removing the 55-gallon steel drum (completed); performing an asbestos survey prior to the demolition of the existing barn on the eastern portion of the project site; removing the delaminated concrete debris containing paint which was observed on the unpaved surfaces of the project site near the concrete pillars of the railroad bridge and disposing the material of in accordance with all applicable federal, State, and local regulations pertaining to LBPs; and that all painted surfaces of the existing barn be treated under the assumption that they contain LBPs during demolition. As detailed in **Mitigation Measure HAZ-1**, the proposed project would be required to implement these recommendations detailed in the Phase I ESA.

Because the groundwater production well located on the project site is inactive and the contamination detected in the samples collected are documented in the SWRCB's GeoTracker database, the Phase I ESA determined that no future investigation of the known groundwater contamination in the well is required.

Mitigation Measure HAZ-1

Phase I Environmental Site Assessment Recommendations. Prior to issuances of any grading or building permit, the project Applicant shall demonstrate to the satisfaction of the City of San Juan Capistrano Development Services Department that the recommendations detailed in the Phase I Environmental Site Assessment (ESA) have been implemented as part of the proposed project. Recommendations detailed in the Phase I ESA include the following:

- A Phase II Environmental Site Assessment shall be performed in order to assess the potential for residual contamination to be present in the area of the former underground storage tanks (USTs) at the project site. The Phase II ESA shall also include a ground-penetrating radar (GPR) survey in order to confirm that all USTs and other subsurface structures associated with the former USTs have been removed. (Completed September 17, 2025)

- Shallow soils near the former herbicide aboveground storage tank (AST) and the orchard areas at the project site shall be sampled to confirm or deny the presence of hazardous substances associated with the former agricultural operations. If hazardous substances associated with the former agricultural operations are confirmed to be present at the site, the contaminated soil shall be removed and disposed of in accordance with all applicable federal, State, and local regulations. (Completed September 17, 2025)

- The 55-gallon steel drum containing unknown material located in the eastern portion of the project site shall be removed and disposed of in accordance with all applicable federal, State, and local regulations. (Completed July 7, 2025).

- An asbestos survey of the structures that would be demolished shall be performed and any identified asbestos-containing materials (ACMs) shall be abated by a licensed abatement contractor according to all applicable federal, State, and local regulations prior to conducting any proposed renovation or demolition activities.

- All painted surfaces at the project site shall be assumed to contain lead-based paints (LBPs) and treated as such unless future testing is conducted proving otherwise. All federal, State, and local regulations pertaining to LBPs shall be followed by any renovation or demolition contractors as appropriate.

- The delaminated concrete debris containing paint which was observed on the unpaved surfaces of the project site near the concrete pillars of the railroad bridge shall be removed and disposed of in accordance with all applicable federal, State, and local regulations in order to minimize potential LBPs impacts to the on-site soils.

As recommended by the Phase I ESA, a Phase II ESA (**Appendix J**) was subsequently prepared for the project site. As previously discussed, the Phase II ESA was prepared in order to investigate the potential presence of CHs, OCPs, TPH, and VOCs in the subsurface of the project site as a result of the former on-site agricultural operations. The Phase II ESA also assessed the potential for residual contamination to be present in the area of the former USTs at the project site.

Although the geophysical survey performed as part of the Phase II ESA did not identify any existing USTs, the survey identified various underground utility lines and two significant subsurface anomalies, which included two backfilled excavation pits in the eastern portion of the project site in locations of the two USTs identified by the Phase I ESA. The two backfilled excavations did not contain any objects within their detected boundaries.

In addition, soil and soil gas sampling and analysis performed as part of the Phase II ESA indicated the presence of low concentrations of one OCP (endrin aldehyde) and one VOC (p-isopropyltoluene) in soil at project site, and the presence of low to high concentrations of several VOCs in soil gas at the project site. However, none of the analytes detected in soil at the project site were at concentrations exceeding the applicable regulatory screening levels. No CHs or TPH were detected in the analyzed soil samples collected from the project site and only benzene and ethylbenzene were detected in soil gas at concentrations exceeding one or more of the applicable regulatory screening levels. Benzene was detected in two of the 11 analyzed soil gas samples at concentrations of 45 and 8.7 µg/m^3, both of which exceeded the applicable residential use regulatory screening level of 3.2

µg/m³. In addition, one of the two detections of benzene in soil gas exceeded the applicable commercial/industrial use regulatory screening level of 14 µg/m³. Ethylbenzene was detected in all 11 of the analyzed soil gas samples at concentrations ranging from 5.1 to 93 µg/m³. Two of the 11 detections of ethylbenzene in soil gas exceeded the applicable residential use regulatory screening level of 37 µg/m³; however, none of the detections of ethylbenzene in soil gas exceeded the applicable commercial/industrial use regulatory screening level of 163 µg/m³.

The benzene and ethylbenzene in soil gas exceeding the applicable screening levels were detected in an area adjacent to the existing barn located in the eastern portion of the project site, east of Trabuco Creek. The barn is currently unoccupied and is used for the storage of pipes and other materials. Portions of the sides of the barn structure are missing panels or are enclosed with uncovered chain-link fencing, thereby significantly increasing the ventilation of the barn. Although the extent of contamination at the project site, specifically in the vicinity of the existing barn, has not been fully delineated, the Phase II ESA determined that based on the current use of the project site, the existing barn, and the immediate surrounding area in the eastern portion of the project site for storage purposes, the potential for contaminated vapors to migrate into the proposed development area at the project site (also known as a "Vapor Intrusion Condition") is not a significant concern. The portion of the project site that contains the contaminated soil gas exceeding the applicable screening levels is proposed to be developed with a parking area. In addition, potential exposure to soil gas contamination during construction would be minimized through implementation of standard construction best management practices, including worker health and safety measures, dust control, and proper handling of contaminated materials. Therefore, the soil gas contamination at the project site would not create a significant hazard to the public or the environment.

Based on the above analysis and the site investigations performed as part of the Phase I ESA and Phase II ESA prepared for the proposed project, implementation of the proposed project would not 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 with implementation of the remaining provisions of **Mitigation Measure HAZ-1**. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.8.4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant with Mitigation Incorporated.

The project site was evaluated via the SWRCB's GeoTracker database,[7] the DTSC's EnviroStor database,[8] and the Cortese List[9] for the purposes of identifying hazardous materials sites associated

[7] State Water Resources Control Board (SWRCB). 2022b. Geotracker Database. <https://geotracker.waterboards.ca.gov/> (accessed July 2025).

[8] California Department of Toxic Substances Control (DTSC). 2022. EnviroStar Database. <https://www.envirostor.dtsc.ca.gov/public/> (accessed July 2025).

[9] California Environmental Protection Agency. 2020. Cortese List Data Resources. <calepa.ca.gov/sitecleanup/corteselist/> (accessed July 2025).

with the project site. According to the Phase I ESA, the project site is listed in the SWRCB's GeoTracker database as a Public Drinking Water Well site. According to the SWRCB's GeoTracker database records, an inactive City groundwater production well is located at the subject property. Testing of the groundwater production well performed from 2001 to 2024 indicated the presence of various contaminants, including emerging contaminants such as Per- and Polyfluoroalkyl Substances (PFAS) at concentrations exceeding the regulatory agency notification and response levels. The Phase I ESA concluded that the presence of contamination in the inactive groundwater production well represents a REC associated with the project site; however, because the groundwater production well located on the project site is inactive and the contamination detected in the samples collected are document in the SWRCB's GeoTracker database, the Phase I ESA determined that no future investigation of the known groundwater contamination in the well is required. Therefore, the proposed project would not create a significant hazard to the public or the environment associated with being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

In addition, as discussed above, with implementation of the recommendations detailed in the Phase I ESA as required by **Mitigation Measure HAZ-1,** the proposed project would not create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts related to creating a significant hazard to the public or the environment would be **less than significant with mitigation incorporated**.

4.8.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for hazards and hazardous materials. The cumulative impact area for hazards and hazardous materials generated or released on any site generally encompasses that site and areas immediately adjacent to or within a one-mile radius. As discussed in the Phase I ESA, regulatory resources did not identify any property within one mile of the project site as representing RECs, HRECs, or CREs to the project site.

Construction and operation/occupation of past, present, and future projects, including the cumulative projects listed in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures, would increase the regional transport, storage, use, and disposal of hazardous materials and petroleum products (e.g., diesel fuel, lubricants, paints, and solvents), as well as cement products containing strong basic or acidic chemicals. For the proposed project, impacts related to hazardous materials during construction would be reduced to less than significant through adherence with applicable regulatory requirements, as discussed in the Initial Study prepared for the proposed project. Impacts related to hazardous materials during operation of the proposed would remain less than significant through the implementation of **Mitigation Measure HAZ-1**, which requires implementation of the recommendations contained in the site-specific Phase I ESA. Similar to the proposed project, any cumulative project for which hazardous materials are present during construction and/or operation would be required to implement best practices and/or mitigation to ensure hazardous materials are managed and disposed of in accordance with regulatory protocols. In addition, cumulative projects would be required to investigate on-site hazardous conditions through

the preparation of a Phase I ESA or similar report. As with the proposed project, project-specific reports investigating the hazardous conditions at a project site would recommend measures to reduce impacts related to the release of hazardous materials. Therefore, no cumulatively significant hazardous materials impacts would occur.

During construction and operation of the proposed project, adequate access for emergency vehicles would be maintained, as discussed in the Initial Study prepared for the proposed project. Similarly, cumulative development would be required to accommodate emergency access along and/or through their respective sites. The City would require any such roadway improvements to conform to established emergency access requirements established by the City and Orange County Fire Authority, applicable provisions of the California Fire Code and California Building Code (CBC), and/or other necessary fire authority requirements. Therefore, no cumulatively significant impacts related to emergency access/evacuation would occur.

Overall, the cumulative hazards and hazardous materials impacts with implementation of the proposed project would be **less than cumulatively considerable**.

4.8.8 Level of Significance Prior to Mitigation

Impacts related to hazards and hazardous materials would be potentially significant without implementation of mitigation.

4.8.9 Regulatory Compliance Measures and Mitigation Measures

4.8.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.8.9.2 Mitigation Measures

The proposed project would be required to implement the following mitigation measure.

Mitigation Measure HAZ-1 **Phase I Environmental Site Assessment Recommendations.** Prior to issuances of any grading or building permit, the project Applicant shall demonstrate to the satisfaction of the City of San Juan Capistrano Development Services Department that the recommendations detailed in the Phase I Environmental Site Assessment (ESA) have been implemented as part of the proposed project. Recommendations detailed in the Phase I ESA include the following:

- A Phase II Environmental Site Assessment shall be performed in order to assess the potential for residual contamination to be present in the area of the former underground storage tanks (USTs) at the project site. The Phase II ESA shall also include a ground-penetrating radar (GPR) survey in order to confirm that all USTs and other subsurface structures associated with the

former USTs have been removed. (Completed September 17, 2025)

- Shallow soils near the former herbicide aboveground storage tank (AST) and the orchard areas at the project site shall be sampled to confirm or deny the presence of hazardous substances associated with the former agricultural operations. If hazardous substances associated with the former agricultural operations are confirmed to be present at the site, the contaminated soil shall be removed and disposed of in accordance with all applicable federal, State, and local regulations. (Completed September 17, 2025)

- The 55-gallon steel drum containing unknown material located in the eastern portion of the project site shall be removed and disposed of in accordance with all applicable federal, State, and local regulations. (Completed July 7, 2025).

- An asbestos survey of the structures that would be demolished shall be performed and any identified asbestos-containing materials (ACMs) shall be abated by a licensed abatement contractor according to all applicable federal, State, and local regulations prior to conducting any proposed renovation or demolition activities.

- All painted surfaces at the project site shall be assumed to contain lead-based paints (LBPs) and treated as such unless future testing is conducted proving otherwise. All federal, State, and local regulations pertaining to LBPs shall be followed by any renovation or demolition contractors as appropriate.

- The delaminated concrete debris containing paint which was observed on the unpaved surfaces of the project site near the concrete pillars of the railroad bridge shall be removed and disposed of in accordance with all applicable federal, State, and local regulations in order to minimize potential LBPs impacts to the on-site soils.

4.8.10 Level of Significance after Mitigation

With implementation of **Mitigation Measure HAZ-1**, impacts related to hazards and hazardous materials would be less than significant.

4.9 HYDROLOGY AND WATER QUALITY

This section discusses the existing hydrologic setting of the project site and provides an analysis of the potential impacts related to hydrology and water quality anticipated with implementation of the proposed Legacy Ranch Project (proposed project). The analysis in this section is based, in part, on the information provided in the *Preliminary Drainage Study, Northwest Open Space Project* (Drainage Study)[1] (**Appendix K**) prepared for the project site by C3 Civil Engineering and dated May 19, 2026; the *Preliminary Water Quality Management Plan* (WQMP)[2] (**Appendix L**) prepared for the project site by Olaunu and dated April 17, 2026; and the *Geotechnical Investigation and Preliminary Design Recommendations Report, San Juan Capistrano Legacy Ranch Northwest Open Space, San Juan Capistrano, California* (Geotechnical Investigation)[3] (**Appendix H**) prepared for the project site by GMU Engineers & Geologists and dated October 9, 2025.

4.9.1 Scoping Process

The City of San Juan Capistrano (City) received two comments during the scoping period for this Draft Environmental Impact Report (EIR) (November 13 through December 15, 2025) concerning the proposed project's potential hydrology and water quality impacts, as discussed below. In addition, no comments pertaining to hydrology and water quality were submitted during the public scoping meeting held on November 19, 2025.

- Larry Kramer, December 9, 2025, raised concerns related to impacts to Trabuco Creek due to contamination by horses and the management of stormwater, including runoff from equestrian uses.

- California Department of Fish and Wildlife (CDFW), December 15, 2025, requested the Draft EIR include a discussion of water quality impacts from equestrian uses, cattle, rodenticides, herbicides, and pesticides.

Scoping comments are provided in **Appendix A** to this Draft EIR.

4.9.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan area in San Juan Capistrano, Orange County. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, a senior living residential community (The Groves Apartments) to the south, and an Orange County Transportation Authority-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route. Undeveloped open space lies directly to the west of the project site.

1 C3 Civil Engineering. 2026. *Preliminary Drainage Study, Northwest Open Space Project.* May 19.
2 Olaunu. 2026. *Preliminary Water Quality Management Plan (WQMP)*. April 17.
3 GMU Engineers & Geologists. 2025. *Geotechnical Investigation and Preliminary Design Recommendations Report, San Juan Capistrano Legacy ranch Northwest Open Space, San Juan Capistrano, California*. October 9.

4.9.2.1 Watershed

The project site is located within the San Juan Creek Watershed, which encompasses approximately 133 square miles in southern Orange County and drains to the Pacific Ocean at Doheny State Beach in the City of Dana Point. The main tributary of the San Juan Creek Watershed is San Juan Creek, which originates in the Santa Ana Mountains within the Cleveland National Forest and flows generally southwest through rural foothills, agricultural lands, and urbanized areas before reaching the ocean. The City of San Juan Capistrano is situated in the middle portion of the watershed, where Trabuco Creek, the largest tributary, joins San Juan Creek. Other significant tributaries include Oso Creek, Bell Canyon, Verdugo Canyon, and Chiquita Canyon, which convey runoff from Mission Viejo, Rancho Mission Viejo, and surrounding foothill areas.[4]

The project site is located within the jurisdictional boundary of the San Diego Regional Water Quality Control Board (RWQCB). For planning purposes, the San Diego RWQCB uses a watershed classification system that divides surface waters into hydrologic units (HUs), hydrologic areas (HAs), and hydrologic subareas (HSA). As designated by the San Diego RWQCB, the project site is located within the San Juan HU, Mission Viejo HA, and the Middle Trabuco HAS.[5]

4.9.2.2 Surface Waters and On-Site Drainage

The irregularly shaped project site is currently developed with the historic Roger Y. Williams/ Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site. Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano with Oso Creek located to the west. Approximately 14 acres of the project site, encompassing Trabuco Creek and its banks, are covenanted with conservation easements. Vegetation includes grasses, shrubs, and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek. In addition, there are three wells owned and operated by the Santa Margarita Water District (SMWD) located on the project site. Within the project site and in the vicinity of the project site, Trabuco Creek exists in its natural state with earthen banks. In addition, an unnamed tributary to Trabuco Creek (Tributary 1) is located on the eastern portion of the project site, south of the existing barn and associated storage containers. Another concrete lined tributary (Tributary 2) to Trabuco Creek, lies further to the south on the project site. Vegetation includes grasses, shrubs, and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek. Approximately 0.9 mile south of the project site, Trabuco Creek becomes channelized before discharging into San Juan Creek, approximately 2.1 miles south of the project site. San Juan Creek is a flood-control channel that directs stormwater southwest and discharges into the Pacific Ocean at Doheny State Beach via Capistrano Bight.

As discussed in the Preliminary WQMP and the Drainage Study, under existing conditions, the project site is covered by approximately 0.5 acre (21,780 square feet) of impervious surface area

[4] United States Army Corps of Engineers (USACE). August. *San Juan Creek Watershed Management Study*. 2002.

[5] California Regional Water Quality Control Board, San Diego Region. 2021. *Water Quality Control Plan for the San Diego Basin (9)*. September 1.

(approximately 0.8 percent of the project site). Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano. Oso Creek is located west of the project site. The project site is relatively flat except for the banks leading down to Trabucco Creek, which are very steep. Under existing conditions, the natural drainage at the project site is generally toward the south and southeast to discharge into Trabuco Creek, conforming to the natural topography. According to the Drainage Study, the project site is divided into 10 existing Drainage Areas (DA-A through DA-J), as described below.

- **DA-A** consists of approximately 2.7 acres along the east side of Trabuco Creek. Within DA-A, stormwater is conveyed east to west via sheet flow over existing landscape, where it outlets into Trabuco Creek.

- **DA-B** consists of approximately 1 acre along the east side of Trabuco Creek. Stormwater is conveyed north to south via sheet flow over existing landscape, where it outlets into Trabuco Creek.

- **DA-C** is approximately 10 acres and drains southwest where it then combines with stormwater flows from DA-D (originating in the northeast portion of the project site). Combined stormwater then continues south, parallel to the railroad tracks, and collects at a low point. During larger storm events, overflow from the low point occurs and flows towards Trabuco Creek and discharges to the creek at the southwest corner of the project site (Outlet 3).

- **DA-D**, located along the west side of the project site, is approximately 7.24 acres. Within DA-A, stormwater drains southwest across primarily pervious surfaces (native vegetation and ground cover) towards the same low point as DA-C (see above). As provided above, stormwater flow from DA-D combines with DA-C and overflows towards Outlet 3 during higher storm volumes.

- **DA-E**, located downstream of DA-C and DA-D, includes a 6.6-acre area conveying flow north to south towards Outlet 3 through area DA-F.

- **DA-F** consists of 8.7-acres located northwest of Trabuco Creek. Within DA-F, stormwater drains from north to south towards Outlet 3. In addition, stormwater runoff from areas DA-C, DA-D and DA-E are conveyed through this drainage area.

- **DA-G** consists of 9.25-acres west of Trabuco Creek and east of DA-E. Stormwater is conveyed north to south via sheet flow across the drainage area and through DA-H to discharge into Trabuco Creek just northeast of Outlet 3 (Outlet 5).

- **DA-H** consists of approximately 4.5-acres and conveys stormwater southwest into an undefined swale along the rim of Trabuco Creek. This swale conveys runoff to the southwest portion of the drainage area, channeling into the Trabuco Creek at Outlet 5.

- **DA-I** consists of 1.5-acres at the southwest corner of the project site, directing flowing into Outlet 3 via sheet flow.

- **DA-J** consists of 4.5-acres located northeast of DA-D. Within DA-J, stormwater flows north to south via sheet flow to discharge into Trabuco Creek east of the Dr. Joe Cortese Dog Park (Outlet 4).

4.9.2.3 Surface Water Quality

As previously discussed, the receiving waters for the project site include Lower Trabuco Creek, San Juan Creek, San Juan Creek Mouth, and the Pacific Ocean. According to the SWRCB Surface Water Quality Assessment 2024 Integrated Report for Clean Water Act Sections 303(d) and 305(b), Lower Trabuco Creek is listed as impaired for indicator bacteria, nutrients (nitrogen and phosphorus), toxicity, and benthic community effects; San Juan Creek is listed as impaired for indicator bacteria, nutrients (nitrogen, dissolved oxygen, and phosphorus), selenium, toxicity, Dichlorodiphenyldichloroethylene (DDE), pesticides (bifenthrin and pyrethroids), and benthic community effects; San Juan Creek Mouth is listed as impaired for indicator bacteria, metals (cadmium, copper, and nickel), and nitrogen (ammonia); and the Pacific Ocean shoreline at the San Juan Creek outfall is impaired for indicator bacteria.[6] Total Maximum Daily Loads (TMDLs) for the listed constituents for Trabuco Creek and the Pacific Ocean shoreline at the San Juan Creek outfall have been established by the San Diego RWQCB. In addition, TMDLs for indicator bacteria, nutrients (nitrogen and phosphorus), selenium, toxicity, DDE, and benthic community effects have been established for San Juan Creek and TMDLs for dissolved oxygen and pesticides (bifenthrin and pyrethroids) are anticipated to be established in 2029 and 2033, respectively.[7] The adopted TMDLs would be applicable to the proposed project.

According to the San Juan Creek Watershed Management Study, there is a documented problem with surface water quality within the San Juan Creek Watershed. The quality of surface water in the creeks generally decreases as it flows downstream towards the ocean, and both the sediment in the area and different flow rates affect the salinity of surface water. Although there are no large point sources of pollutants within the watershed, sporadic releases of sewage due to pipeline breakage, operational malfunctions, and other related problems have been reported to occur. Overall, the San Juan Creek Watershed Management Study found that contamination of surface waters in the city and the greater watershed is a result of discharge from non-point sources that include poor land use and cleaning practices and other factors exacerbated by stagnant conditions in some of the channel reaches.[8]

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6 State Water Resources Control Board (SWRCB). 2025. California 2024 Integrated Report (303(d) List/305(b) Report), <https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html> (accessed July 2025).

7 State Water Resources Control Board (SWRCB). 2025. California 2024 Integrated Report (303(d) List/305(b) Report), <https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html> (accessed July 2025).

8 United States Army Corps of Engineers (USACE). 2002. *San Juan Creek Watershed Management Study*. 2002. August.

4.9.2.4 Groundwater

According to the California Department of Water Resources (DWR), the majority of the project site is located within the boundaries of the San Juan Valley Groundwater Basin (Basin).[9] The surface area of the Basin is approximately 16,700 acres or 26 square miles, with average annual rainfall ranging from approximately 11 to 15 inches. The Basin is bounded on the west by the Pacific Ocean and otherwise by Tertiary semi-permeable marine deposits. San Juan Creek, Oso Creek, and Trabuco Creek are the main tributary streams in the Basin.[10] The estimated groundwater storage capacity of the Basin is 90,000 acre-feet (af).[11] Natural recharge is primarily from infiltration of runoff from San Juan Creek, Oso Creek, and Trabuco Creek and precipitation on the valley floor.[12]

According to the Geotechnical Investigation (**Appendix H**), groundwater was encountered in drill holes at the project site between 39.8 and 53.8 feet below ground surface (bgs). However, the Geotechnical Investigation notes that this is not generally consistent with the depth of historically high groundwater identified in the Seismic Hazard Zone Report for the San Juan Capistrano Quadrangle, which indicates that historic high groundwater is five feet bgs. Seasonal fluctuations in the groundwater level may occur.

In addition, Trabuco Creek runs through the southern portion of the project site and exerts influence on groundwater levels near the creek. Therefore, the likely high groundwater condition is a groundwater table drawn at a 2 percent slope that rises from Trabuco Creek, resulting in a design groundwater depth of approximately 35 feet bgs. Another source of groundwater is Oso Creek, which is located between approximately 150 to 300 yards west of the project site. Although more distant, Oso Creek may also exert a localized influence on groundwater conditions. Measurements from nearby monitoring well indicate deeper groundwater at elevations of between 141 and 143 feet or 49 and 67 feet bgs.

4.9.2.5 Groundwater Quality

Groundwater in the San Juan Valley Groundwater Basin typically has a calcium bicarbonate or bicarbonate-sulfate character below the upper reaches of the valleys, and a calcium-sodium sulfate or sulfate-chloride near the coast. In general, total dissolved solids (TDS) content in groundwater increases from below 500 milligrams per liter (mg/L) in the upper reaches of the valleys to near 2,000 mg/L near the coast, and TDS content of water from 3 public supply wells averages 760 mg/L and ranges from 430 mg/L to 1,250 mg/L.

In addition, groundwater in the western part of the basin has high TDS content, and water coming from springs in Thermal Canyon has high fluorine content.[13]

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9 California Department of Water Resources (DWR). n.d.-b. Groundwater Basin Boundary Assessment Tool. <https://gis.water.ca.gov/app/bbat/> (accessed July 2025).

10 California Department of Water Resources (DWR). 2004. *San Juan Valley Groundwater Basin Bulletin 118*. February 27.

11 California Department of Water Resources (DWR). 2004. *San Juan Valley Groundwater Basin Bulletin 118*. February 27.

12 Ibid.

13 Ibid.

4.9.2.6 Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06059C0443J (effective December 3, 2009),[14] the majority of the project site is mapped as within Zone X, Area of Minimal Flood Hazard, and is not within a 1 percent annual chance (100-year) flood zone. However, the area of the project site that contains Trabuco Creek is mapped as within Zone AE, Regulatory Floodway.

4.9.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to hydrology and water quality that are relevant to the proposed project.

4.9.3.1 Federal Policies and Regulations

Clean Water Act. In 1972, the Federal Water Pollution Control Act of 1948 (now referred to as the Clean Water Act [CWA]) was amended to require that the discharge of pollutants into waters of the United States from any point source be effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, the CWA was again amended to require that the United States Environmental Protection Agency (USEPA) establish regulations for the permitting of stormwater discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that Municipal Separate Storm Sewer System (MS4) discharges to surface waters be regulated by an NPDES permit.

The CWA requires states to adopt water quality standards for water bodies and have those standards approved by the USEPA. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. Because California had not established a complete list of acceptable water quality criteria for toxic pollutants, the USEPA Region 9 (Pacific Southwest) established numeric water quality criteria for toxic constituents in the form of the California Toxics Rule (CTR).

When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. Once a water body has been deemed impaired, a TMDL must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

[14] Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map (FIRM) No. 06059C0443J. December 3.

Direct discharges of pollutants into waters of the United States are not allowed except in accordance with the NPDES program established in Section 402 of the CWA.

Clean Water Act, Section 303, List of Impaired Water Bodies. The State Water Resources Control Board (SWRCB), in compliance with Section 303(d) of the CWA, prepares a list of impaired and threatened waters (e.g., stream/river segments, lakes). States are required to submit their list for USEPA approval every two years. For each water body on the list, the SWRCB identifies the pollutant causing the impairment, when known. In addition, the SWRCB assigns a priority for development of TMDLs based on the severity of the pollution and the sensitivity of the uses for which the waters are being used, among other factors.

In general, once a water body has been added to a state's list of impaired waters, it remains on the list until the state develops a TMDL and the USEPA approves it. USEPA reporting guidance provides guidelines to keep track of a state's water bodies, from listing as impaired to meeting water quality standards. This tracking system contains a running account of all of the state's water bodies and categorizes each based on the attainment status, which was published as the 2024 California Integrated Report. The 2024 California Integrated Report was partially approved and partially disapproved by the USEPA on December 13, 2024. The USEPA approved the majority of the 303(d) list, but identified 53 water body-pollutant combinations it is considering adding to the 303(d) list. The 2024 California Integrated Report is the current integrated report except for the 53 water body-pollutant combinations in review by the USEPA.[15]

Clean Water Act, Section 402, National Pollutant Discharge Elimination System Permit Program. Under Section 402 of the Clean Water Act, the discharge of pollutants through a point source into waters of the United States is prohibited unless the discharge is in compliance with an NPDES permit. The NPDES program regulates the discharge of pollutants from municipal and industrial wastewater treatment plants and sewer collection systems, as well as stormwater discharges from industrial facilities, municipalities, and construction sites. In California, implementation and enforcement of the NPDES program is conducted through the SWRCB and the nine regional water quality control boards. The regional water boards set standard conditions for each permittee in their region, which includes effluent limitations and monitoring programs.

National Flood Insurance Act. Congress acted to reduce the costs of disaster relief by passing the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts was to reduce the need for large, publicly funded flood control structures and disaster relief efforts by restricting development in floodplains. FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in a floodplain. FEMA issues FIRMs of communities participating in the NFIP. These maps delineate flood hazard zones in the community. The City of San Juan Capistrano

[15] State Water Resources Control Board (SWRCB). 2024. *2024 California Integrated Report.* <https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html> (accessed April 2025).

manages local storm drain facilities, and the Orange County Flood Control District (OCFCD) is responsible for regional flood control planning within Orange County.

4.9.3.2 State Policies and Regulations

California Fish and Game Code Section 1602. California Fish and Game Code Section 1602 requires any person, State, local governmental agency, or public utility to notify the California Department of Fish and Wildlife (CDFW) prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or
- Deposit or dispose of material into any river, stream, or lake.

If the project activity may substantially adversely affect fish and wildlife resources, CDFW requires the project to obtain a Lake or Streambed Alteration Agreement.

Porter-Cologne Water Quality Control Act of 1970. The federal CWA places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs.

California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and the nine RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California's responsibilities under the federal CWA. The Porter-Cologne Act authorizes the SWRCB and RWQCBs to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its state water policies. The Porter-Cologne Act also provides that an RWQCB may include a regional plan with water discharge prohibitions applicable in its region to particular conditions, areas, or types of waste. The City, including the project site, is within the jurisdictional boundaries of the San Diego RWQCB (Region 9).

California Toxics Rule. As stated previously, because California had not established a complete list of acceptable water quality criteria for toxic pollutants, USEPA Region 9 established numeric water quality criteria for toxic constituents in the form of the CTR. The CTR provides water quality criteria for certain potentially toxic compounds for inland surface waters, enclosed bays, estuaries, and waters designated for human health or aquatic life uses. The CTR is often used by the RWQCBs when establishing water quality objectives and TMDLs. Although the CTR criteria do not apply directly to discharges of stormwater runoff, they are utilized as benchmarks for toxics in urban runoff. The CTR is

used as a benchmark to evaluate the potential ecological impacts of stormwater runoff to receiving waters. The CTR establishes acute and chronic surface water quality standards for certain water bodies. Acute criteria provide benchmarks for the highest permissible concentration below which aquatic life can be exposed for short periods of time without deleterious effects. Chronic criteria provide benchmarks for an extended period of time (i.e., 4 days or more) without deleterious effects. The acute CTR criteria have a shorter relevant averaging period (less than 4 days) and provide a more appropriate benchmark for comparison for stormwater flows.

CTR criteria apply to the receiving water body and are calculated based on the probable hardness values of the receiving waters. At higher hardness values for receiving waters, certain constituents (including copper, lead, and zinc) are more likely to be complexed (bound with) components in the water column. This in turn reduces the bioavailability and resulting potential toxicity of these metals.

General Construction Activity Storm Water Permit. The NPDES *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities,* Order WQ 2022-0057-DWQ, NPDES No. CAS000002 (Construction General Permit),[16] adopted by the SWRCB, regulates construction activity that includes clearing, grading, and excavation resulting in soil disturbance of at least one acre of total land area.

To obtain coverage under the Construction General Permit, a project applicant must electronically file all permit registration documents with the SWRCB prior to the start of construction. Permit registration documents must include a:

- Notice of Intent (NOI),
- Risk Assessment,
- Site map,
- SWPPP,
- Annual fee, and
- Signed certification statement.

Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. The permit also covers linear underground and overhead projects, such as pipeline installations. Construction General Permit activities are regulated at the local level by the RWQCB.

The Construction General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (i.e., Level 1, Level 2, or Level 3). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on the project location and timing (i.e., wet season versus dry season activities). The receiving water risk depends on whether the project would discharge to a sediment-sensitive receiving water. The determination of the project risk level would be made by the project applicant

[16] State Water Resources Control Board (SWRCB). 2022. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit), Order WQ 2022-0057-DWQ, NPDES No. CAS000002*. Adopted September 8.

when the Notice of Intent is filed (and more details of the timing of the construction activity are known).

The performance standard in the Construction General Permit is that dischargers shall minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and best management practices (BMPs) that achieve Best Available Technology for treatment of toxic and non-conventional pollutants and Best Conventional Technology for treatment of conventional pollutants. A Stormwater Pollution Prevention Plan (SWPPP) must be prepared by a Qualified SWPPP Developer that meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is to (1) identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges and (2) describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Operation of BMPs must be overseen by a Qualified SWPPP Practitioner who meets the requirements outlined in the Construction General Permit.

The SWPPP must also include a construction site monitoring program. Depending on the project risk level, the monitoring program may include visual observations of project site discharges, water quality monitoring of project site discharges (pH, turbidity, and non-visible pollutants, if applicable), and receiving water monitoring (pH, turbidity, suspended sediment concentration, and bioassessment).

The Construction General Permit allows non-stormwater discharge of groundwater dewatering effluent if the water is properly filtered and treated to remove sediment and pollutants using appropriate technologies (e.g., filtration, settling, coagulant application with no residual coagulant discharge, minor odor or color removal with activated carbon, small-scale peroxide addition, or other minor treatment). Testing of receiving waters would also be required prior to and during the discharge. The discharge of dewatering effluent is authorized under the Construction General Permit if the following conditions are met:

- The discharge does not cause or contribute to a violation of any water quality standard.
- The discharge does not violate any other provision of the Construction General Permit.
- The discharge is not prohibited by the applicable Basin Plan.
- The discharger has included and implemented specific BMPs required by the Construction General Permit to prevent or reduce the contact of the non-stormwater discharge with construction materials or equipment.
- The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants.
- The discharge is monitored and meets the applicable numeric action levels.
- The discharger reports the sampling information in the annual report.

If any of the above conditions are not satisfied, the discharge of dewatering effluent is not authorized by the Construction General Permit. If the dewatering activity is determined by the RWQCB not to be covered by the Construction General Permit or other NPDES permit, and discharge of groundwater to the storm drain system is planned, then the discharger would be required to prepare a Report of Waste Discharge, and if approved the RWQCB would issue project site-specific Waste Discharge Requirements (WDRs) under NPDES regulations.

Sustainable Groundwater Management Act. The Sustainable Groundwater Management Act (SGMA) of 2014 is a comprehensive three-bill package that Governor Jerry Brown signed into State law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention if necessary to protect the resource. The plan is intended to ensure a reliable groundwater supply for California for years to come.

The SGMA requires governments and water agencies of high- and medium-priority basins to halt overdrafts of groundwater basins. The SGMA provides authority for agencies to develop and implement Groundwater Sustainability Plans (GSP) or alternative plans that demonstrate the basin is being managed sustainably. As previously discussed, the majority of the project site is located within the boundaries of the San Juan Valley Groundwater Basin, which identified by the Department of Water Resources as a very low priority basin.[17] Therefore, development of a GSP or an approved GSP alternative is not required.

4.9.3.3 Regional Regulations

Water Quality Control Plans (Basin Plans). The Basin Plan adopted by the San Diego RWQCB in September 1994, updated on September 1, 2021, delineates water resource area boundaries based on hydrological features, designates beneficial uses for all surface and groundwater within its jurisdiction, and establishes the water quality objectives and standards necessary to protect those beneficial uses.[18] For the purposes of achieving and maintaining water quality protection, specific beneficial uses have been identified for each of the surface waters and groundwater management zones described in the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives can be established, and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses.

The beneficial uses of surface receiving waters in the project area (i.e., Trabuco Creek, Oso Creek, San Juan Creek, and the Pacific Ocean) are provided in **Table 4.9.A: Beneficial Uses of Receiving Waters**.

[17] California Department of Water Resources (DWR). n.d.-c. SGMA Basin Prioritization Dashboard. <https://gis.water.ca.gov/app/bp-dashboard/final/> (accessed October 2025).

[18] California Regional Water Quality Control Board, San Diego Region. 2021. *Water Quality Control Plan for the San Diego Basin (9)*. September 1.

The project site is within the Middle Trabuco Hydrologic Sub Area. Beneficial uses of the Middle Trabuco Hydrologic Sub Area include municipal and domestic supply (MUN), agricultural supply (AGR), and industrial service supply (IND).[19]

Basin Plans also establish implementation programs to achieve water quality objectives to protect beneficial uses and require monitoring to evaluate the effectiveness of the programs. These objectives must comply with the State antidegradation policy (State Board Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected.

Table 4.9.A: Beneficial Uses of Receiving Waters

Beneficial Use	Trabuco Creek	Oso Creek	San Juan Creek	Pacific Ocean
Municipal and Domestic Supply (MUN)			X	
Agricultural Supply (AGR)	X	X		
Industrial Service Supply (IND)	X	X	X	X
Navigation (NAV)				X
Water Contact Recreation (REC1)	X	X	X	X
Non-contact Water Recreation (REC2) (Secondary Contact Recreation)	X	X	X	X
Commercial and Sport Fishing (COMM)				X
Preservation of Biological Habitats of Special Significance (BIOL)				X
Warm Freshwater Habitat (WARM)	X	X	X	
Cold Freshwater Habitat (COLD)	X	X	X	
Wildlife Habitat (WILD)	X	X	X	X
Rare, Threatened, or Endangered Species (RARE)				X
Marine Habitat (MAR)				X
Aquaculture (AQUA)				X
Migration of Aquatic Organisms (MIGR)				X
Spawning, Reproduction, and/or Early Development (SPWN)				X
Shellfish Harvesting (SHELL)				X

Source: *Water Quality Control Plan for the San Diego Basin (9)* (California Regional Water Quality Control Board, San Diego Region, September 1, 2021).
X = Existing Beneficial Use

Basin Plans have established narrative and numeric water quality objectives for inland surface streams, enclosed bays, estuaries and groundwater. If water quality objectives are exceeded, the RWQCBs can use their regulatory authority to require municipalities to reduce pollutant loads to the affected receiving waters. Relevant surface water quality objectives for all inland surface waters, enclosed bays and estuaries, and groundwater under the jurisdiction of the San Diego RWQCB that are applicable to the receiving waters for the project site are shown in **Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters**.[20]

[19] Ibid.

[20] California Regional Water Quality Control Board, San Diego Region. 2021. *Water Quality Control Plan for the San Diego Basin (9)*. September 1.

Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters

<table>
<tr><th>Constituent</th><th>Basin Plan Objective</th></tr>
<tr><td>Ammonia, Un-ionized</td><td>The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.</td></tr>
<tr><td>Bacteria – Total Coliform, fecal coliform, E. coli, and Enterococci</td><td>Waters designated for contact recreation shall not contain concentrations of indicator bacteria in excess of the following:

E. coli

The bacteria water quality objective for all waters where the salinity is equal to or less than 1 part per thousand (ppt) 95 percent or more of the time during the CALENDAR YEAR is: a six-week rolling GEOMETRIC MEAN of Escherichia coli (E. coli) not to exceed 100 colony forming units (cfu) per 100 milliliters (ml), calculated weekly, and a STATISTICAL THRESHOLD VALUE (STV) of 320 cfu/100 ml not to be exceeded by more than 10 percent of the samples collected in a CALENDAR MONTH, calculated in a static manner.

USEPA recommends using U.S. EPA Method 1603 or other equivalent method to measure culturable E. coli.

Enterococci

The bacteria water quality objective for all waters where the salinity is greater than 1 ppt more than 5 percent of the time during the CALENDAR YEAR is: a six-week rolling GEOMETRIC MEAN of enterococci not to exceed 30 cfu/100 ml, calculated weekly, with a STV of 110 cfu/100 ml not to be exceeded by more than 10 percent of the samples collected in a CALENDAR MONTH, calculated in a static manner.

USEPA recommends using U.S. EPA Method 1600 or other equivalent method to measure culturable enterococci.

<table>
<tr><th rowspan="2">Applicable Waters</th><th>Objective Elements</th><th colspan="2">Estimated Illness Rate (NGI): 32 per 1,000 water contact recreators Magnitude (cfu/100 ml)</th></tr>
<tr><td>Indicator</td><td>GM</td><td>STV</td></tr>
<tr><td>All waters where the salinity is equal to or less than 1 ppt 95 percent or more of the time</td><td>E. coli</td><td>100</td><td>320</td></tr>
<tr><td>All waters where the salinity is greater than 1 ppt more than 5 percent of the time</td><td>Enterococci</td><td>30</td><td>110</td></tr>
</table>
Table notes:
1. The waterbody GM shall not be greater than the applicable GM magnitude in any six-week interval, calculated weekly. The applicable STV shall not be exceeded by more than 10 percent of the samples collected in a CALENDAR MONTH, calculated in a static manner.
2. NGI = National Epidemiological and Environmental Assessment of Recreational Water gastrointestinal illness rate
3. GM = geometric mean
4. STV = statistical threshold value
5. cfu = colony forming units
6. ppt = parts per thousand</td></tr>
</table>

Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters

Constituent	Basin Plan Objective
	7. ml = milliliters **Fecal Coliform Water Quality Objective for Non-contact Recreation** In waters designated for non-contact recreation (REC-2) and not designated for contact recreation (REC-1), the average fecal coliform concentrations for any 30-day period, shall not exceed 2,000 organisms per 100 ml nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 organisms per 100 ml. **Total Coliform Water Quality Objective for Shellfish Harvesting** In waters where shellfish harvesting for human consumption, commercial or sports purposes is designated (SHELL and COMM), the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 organisms per 100 ml nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 organisms per 100 ml for a five-tube decimal dilution test or 330 organisms per 100 ml when a three-tube decimal dilution test is used. **E. Coli Water Quality Objective for Whole Fish Handling for San Diego Bay** In San Diego Bay where bay waters are used for whole fish handling, the density of E. coli shall not exceed 7 organisms per ml in more than 20 percent of any 20 daily consecutive samples of bay water
Biostimulatory Substances	Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorus (P) concentrations shall not exceed 0.05 milligrams per liter (mg/l) in any stream at the point where it enters any standing body of water, nor 0.025 mg/l in any standing body of water. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/l total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. Inland surface waters shall not contain biostimulatory substances in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan.
Boron	Inland surface waters shall not contain boron in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain boron in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Chlorides	Inland surface waters shall not contain chlorides in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan.

Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters

<table>
<tr><th>Constituent</th><th>Basin Plan Objective</th></tr>
<tr><td></td><td>Ground waters shall not contain chlorides in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.</td></tr>
<tr><td>Color</td><td>Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. The natural color of fish, shellfish or other resources in inland surface waters, coastal lagoon or bay and estuary shall not be impaired. Inland surface waters shall not contain color in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain color in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.</td></tr>
<tr><td>Dissolved Oxygen</td><td>Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.</td></tr>
<tr><td>Floating Material</td><td>Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.</td></tr>
<tr><td>Fluoride</td><td>Inland surface waters shall not contain fluoride in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan.

Ground waters shall not contain fluoride in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.</td></tr>
<tr><td>Hydrogen Ion Concentration (pH)</td><td>Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR), or estuarine (EST), or saline (SAL) beneficial uses. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated cold freshwater habitat (COLD) or warm freshwater habitat (WARM) beneficial uses.

In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0.

In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.</td></tr>
<tr><td>Inorganic Chemicals – Primary Standards</td><td>Water Quality Objective for Domestic or Municipal Supply

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of inorganic chemicals in excess of the maximum contaminant levels set forth in California Code of Regulations, Title 22, Table 64431-A of section 64431 (Inorganic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.

<table>
<tr><th>Chemical</th><th>Maximum Contaminant Level, mg/l</th></tr>
<tr><td>Aluminum</td><td>1.</td></tr>
<tr><td>Antimony</td><td>0.006</td></tr>
<tr><td>Arsenic</td><td>0.010</td></tr>
<tr><td>Asbestos</td><td>7 MFL*</td></tr>
<tr><td>Barium</td><td>1.</td></tr>
<tr><td>Beryllium</td><td>0.004</td></tr>
<tr><td>Cadmium</td><td>0.005</td></tr>
<tr><td>Chromium</td><td>0.05</td></tr>
<tr><td>Cyanide</td><td>0.15</td></tr>
<tr><td>Fluoride</td><td>2.0</td></tr>
<tr><td>Mercury</td><td>0.002</td></tr>
<tr><td>Nickel</td><td>0.1</td></tr>
</table>
</td></tr>
</table>

Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters

Constituent	Basin Plan Objective
	Nitrate (as NO_3) 45. Nitrate + Nitrite (sum as nitrogen) 10. Nitrate (as nitrogen) 1. Perchlorate 0.006 Selenium 0.05 Thallium 0.002 *MFL = million fibers per liter, MCL for fibers exceeding 10 um in length.
Iron	Inland surface waters shall not contain iron in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain iron in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Manganese	Inland surface waters shall not contain manganese in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain manganese in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Methylene Blue – Activated Substances (MBAS)	Inland surface waters shall not contain MBAS in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain MBAS in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Nitrate	Inland surface waters shall not contain nitrate (as NO_3) in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain nitrate (as NO_3) in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Oil and Grease	Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.
Organic Chemicals – Primary Standards	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.
Percent Sodium and Adjusted Sodium Absorption Ratio	Inland surface waters shall not contain percent sodium in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain percent sodium in excess of the numerical objectives described in Table 3-10 of the Basin Plan. In some cases, adjusted sodium adsorption ratio may be a better indicator of the potential sodium hazard in irrigation water than percent sodium. The Regional Board Executive Officer may authorize the use of adjusted sodium absorption ratio instead of percent sodium to indicate the potential sodium hazard. In such cases, the adjusted sodium adsorption ratio shall not exceed the slight to moderate range of values referenced in Table 3-8 “Guidelines for Interpretation of Water Quality for Irrigation.”
Pesticides	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.

Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters

<table>
<tr><th>Constituent</th><th>Basin Plan Objective</th></tr>
<tr><td></td><td>Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.</td></tr>
<tr><td>Phenolic Compounds</td><td>Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of phenolics in excess of 1.0 ug/l.</td></tr>
<tr><td>Radioactivity</td><td>Water Quality Objective for Radioactivity

Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life.

Water Quality Objective for Radionuclides

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the levels specified in section 64442 of Title 22 of the California Code of Regulations (Natural Radioactivity) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.</td></tr>
<tr><td>Secondary Drinking Water Standards</td><td>Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in Table 64449-A of section 64449 of Title 22 of the California Code of Regulations (Secondary Maximum Contaminant Levels, Consumer Acceptance Limits) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.

<table>
<tr><th>Constituent</th><th>Maximum Contaminant levels</th></tr>
<tr><td>Aluminum</td><td>0.2 mg/l</td></tr>
<tr><td>Color</td><td>15 units</td></tr>
<tr><td>Copper</td><td>1.0 mg/l</td></tr>
<tr><td>Corrosivity</td><td>Noncorrosive</td></tr>
<tr><td>Foaming Agents (MBAS)</td><td>0.5 mg/l</td></tr>
<tr><td>Iron</td><td>0.3 mg/l</td></tr>
<tr><td>Manganese</td><td>0.05 mg/l</td></tr>
<tr><td>Methyl-tert-butyl ether (MTBE)</td><td>0.005 mg/l</td></tr>
<tr><td>Odor Threshold</td><td>3 units</td></tr>
<tr><td>Silver</td><td>0.1 mg/l</td></tr>
<tr><td>Thiobencarb</td><td>0.001 mg/l</td></tr>
<tr><td>Turbidity</td><td>5 units</td></tr>
<tr><td>Zinc</td><td>5.0 mg/l</td></tr>
</table>
</td></tr>
<tr><td>Sediment</td><td>The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.</td></tr>
</table>

Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters

Constituent	Basin Plan Objective
Suspended and Settleable Solids	Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
Sulfate	Inland surface waters shall not contain sulfate in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain sulfate in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Taste and Odor	Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. The natural taste and odor of fish, shellfish or other Regional water resources used for human consumption shall not be impaired in inland surface waters and bays and estuaries. Inland surface waters shall not contain odors in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain odors in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Temperature	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.
Total Dissolved Solids	Inland surface waters shall not contain total dissolved solids in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Ground waters shall not contain total dissolved solids in concentrations in excess of the numerical objectives described in Table 3-10 of the Basin Plan.
Toxicity	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with requirements specified in USEPA, State Water Resources Control Board or other protocol authorized by the Regional Board. As a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour acute bioassay. In addition, effluent limits based upon acute bioassays of effluents will be prescribed where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data become available, and source control of toxic substances will be encouraged.
Trihalomethanes	Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of trihalomethanes in excess of the criteria set forth in California Code

Table 4.9.B: Water Quality Objectives for Inland Surface Waters and Groundwaters

<table>
<tr><th>Constituent</th><th>Basin Plan Objective</th></tr>
<tr><td></td><td>of Regulations, Title 22, section 64533 which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to section 64533 as the changes take effect.</td></tr>
<tr><td>Turbidity</td><td>Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Inland surface waters shall not contain turbidity in excess of the numerical objectives described in Table 3-9 of the Basin Plan.

Ground waters shall not contain turbidity in excess of the numerical objectives described in Table 3-10 of the Basin Plan.

The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of a standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:
<table>
<tr><th>Natural Turbidity</th><th>Maximum Increase</th></tr>
<tr><td>0-50 NTU</td><td>20% over natural turbidity level</td></tr>
<tr><td>50-100 NTU</td><td>10 NTU</td></tr>
<tr><td>Greater than 100 NTU</td><td>10% over natural turbidity level</td></tr>
</table>
In addition, within San Diego Bay, the transparency of bay waters, insofar as it may be influenced by any controllable factor, either directly or through induced conditions, shall not be less than 8 feet in more than 20 percent of the readings in any zone, as measured by a standard Secchi disk. Wherever the water is less than 10 feet deep, the Secchi disk reading shall not be less than 80 percent of the depth in more than 20 percent of the readings in any zone.</td></tr>
</table>

Source: *Water Quality Control Plan for the San Diego Basin (9),* Chapter 3 (California Regional Water Quality Control Board, San Diego Region, September 1, 2021).

Regional Municipal Separate Storm Sewer Systems (MS4) Permit. The City is a co-permittee under the San Diego RWQCB's *NPDES Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region, Order No. R9-2013-001, NPDES No. CAS0109266* (Regional MS4 Permit) as amended by *Order Nos. R9-2015-001 and R9-1015-0100*.[21] The Regional MS4 Permit requires the preparation of project-specific Water Quality Management Plans (WQMPs) for new development and significant redevelopment projects that qualify as Priority Development Projects and the implementation of Site Design, Source Control, and Low Impact Development (LID) BMPs. Site Design BMPs are

[21] California Regional Water Quality Control Board, San Diego Region. 2015. Order No. R9-2013-001, As Amended by Order Nos. R9-2015-001 and R9-1015-0100, NPDES No. CAS0109266, Nation Pollution Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region.

stormwater management strategies that emphasize conservation and use of existing site features to reduce the amount of runoff and pollutant loading generated from a project site. Source Control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into stormwater. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff rather than allowing runoff to flow directly to piped or impervious storm drains. The Final WQMP would specify the operational BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff. In the city, compliance with the Regional MS4 Permit is achieved through Title 8, Chapter 14, Water Quality Regulations, of the City's Municipal Code.

The proposed project is considered a Priority Development Project because it would create and/or replace 5,000 square feet or more of impervious surface at the project site.

Orange County Drainage Area Management Program. The Drainage Area Management Plan (DAMP) was created by the County of Orange, the OCFCD, and incorporated cities (permittees), and includes specific water pollutant requirements of the Orange County Stormwater Program. The DAMP is the principal guidance and compliance document for the county-wide implementation of the Stormwater Program. It is the foundation for the permittees to implement model programs designed to prevent pollutants from entering receiving waters to the maximum extent practicable. Section 7 of the DAMP discusses issues relating to new developments and significant redevelopments.

Model Water Quality Management Plan. The Model Water Quality Management Plan (Model WQMP) for South Orange County[22] was developed to aid Orange County, the OCFCD, the cities in Orange County (permittees), and developers in Orange County to address post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects that qualify as Priority Development Projects.

As previously discussed, Priority Development Projects are required to develop a WQMP to minimize adverse impacts of development to on-site hydrology, volume and rate of runoff, and pollutants of concern. Project WQMPs include project-specific BMPs to minimize these effects (e.g., LID, site design measures, source control BMPs). The requirements identified in the WQMPs are subject to Section 7 of the DAMP.

Technical Guidance Document. The County of Orange developed the Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs) in South Orange County (TGD)[23] in cooperation with the incorporated cities of South Orange County to aid agency staff and project proponents with addressing post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects in Orange County. The TGD serves as a technical guidance to complete the Project WQMP.

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22 Orange County. 2017. *Model Water Quality Management Plan (Model WQMP) for South Orange County.* September 28.

23 Orange County. 2017. *Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs) in South Orange County*. September 28. Updated December 21, 2018.

Orange County Construction Runoff Guidance Manual. The *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers*[24] presents the requirements related to construction from the DAMP. The goal of this Guidance Manual is to control pollutant discharges from construction sites. As such, it helps applicants with building and grading permits to understand the water quality requirements during the construction phase of development projects.

South Orange County Hydromodification Management Plan. Pursuant to the requirements of the Regional MS4 Permit, the County prepared the South Orange County Hydromodification Management Plan (HMP).[25] All priority development projects that do not meet the exemption criteria are required to comply with hydromodification criteria in the HMP. The goal of hydromodification control is to integrate hydrologic controls into a proposed project so that post-project runoff discharge rates and durations do not exceed predevelopment (naturally occurring) discharge rates and durations.

4.9.3.4 Location Regulations

Jurisdictional Runoff Management Plan. The City's Jurisdictional Runoff Management Plan (JRMP) is the principal guidance and compliance document specific to the City's jurisdiction for compliance with the requirements of the Regional MS4 Permit. The JRMP provides the description and details of the City's water quality program implementation activities. The JRMP is designed to work in conjunction with the Orange County DAMP.

City of San Juan Capistrano General Plan. The Conservation and Open Space and Floodplain Management Elements of the City's General Plan contain the following goals and implementing policies related to hydrology and water quality that would be applicable to the proposed project:

- **Conservation and Open Space Goal 7:** Protect water quality.
    - **Policy 7.1:** Coordinate water quality and supply programs with the responsible water agencies.
    - **Policy 7.2:** Encourage the production and use of recycled water.
    - **Policy 7.3:** Conserve and protect watershed areas.
- **Floodplain Management Goal 1:** Protect life and property from floodwaters.
    - **Policy 1.1:** Limit development within the floodplain to minimize risks to life and property and satisfy the flood insurance and other requirements of the Federal Emergency management Agency (FEMA).

[24] Orange County. 2012. *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers.* December.

[25] Orange County. 2015. *South Orange County Hydromodification Management Plan*. April 1. Revised September 29, 2017.

- **Policy 1.2:** Prevent the placement of unauthorized fill material in creeks and floodplains in order to avoid alteration of flow characteristics and bridge scour.

- **Floodplain Management Goal 2:** Preserve and enhance the natural character of the creeks and their floodplains.

  - **Policy 2.2:** Enhance and/or restore the creeks and their floodplains as part of private development projects and public works projects.

City of San Juan Capistrano Municipal Code. Building and construction in the city are subject to the regulations of the City's Municipal Code. The following provisions of the City's Municipal Code are related to hydrology and water quality:

- **Title 8, Chapter 2, Building Code:** Chapter 2 of the City's Municipal Code adopts the 2022 California Building Code (CBC) and provides regulations for construction of buildings and structures.

  - **Section 8-2.15** of the City's Municipal Code requires the installation of erosion control devices and systems prior to any grading activities on a project site.

  - **Section 8-2.16** of the City's Municipal Code requires erosion control devices and systems be maintained to ensure that they are operating effectively, including clearing erosion control devices and systems after rain events.

- **Title 8, Chapter 11, Floodplain Management Regulations:** Chapter 11 of the City's Municipal Code in intended to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions within flood prone, mudslide (i.e., mudflow) or flood related erosion areas.

  - **Section 8-11.115** of the City's Municipal Code specifies the design requirements for developments within a 100-year floodplain. Certification of the final elevation of the first floor by a registered professional engineer or surveyor is required to provided to floodplain administrator for new developments within a 100-year floodplain.

- **Title 8, Chapter 14, Water Quality Regulations:** Chapter 14 of the City's Municipal Code provides for the enhancement and protection of the water quality, consistent with the Clean Water Act and State law.

  - **Section 8-14.103** of the City's Municipal Code prohibits the discharge of non-stormwater or any pollutant into the City's stormwater drainage systems except in compliance with Chapter 14.

  - **Sections 8-14.105 and 8-14.106** of the City's Municipal Code requires the preparation of a Water Quality Management Plan (WQMP) in compliance with NPDES permit requirements (i.e., the Regional MS4 Permit) and the implementation of BMPs to target pollutants of concern during operation.

- **Section 8-14.107** of the City's Municipal Code requires coverage under the Construction General Permit prior to the commencement of construction activities involving ground or soil disturbance that can potentially generate pollutants in stormwater runoff. Section 8-14.107 also requires the preparation of a pollution control plan, construction BMP plan, and/or an erosion and sediment control plan, in compliance with the Orange County DAMP and JRMP.

- **Section 8-14.108** of the City's Municipal Code requires proper maintenance and monitoring of post-construction BMPs to ensure that they are operating effectively and are being adequately maintained.

4.9.4 Methodology

The proposed project's impacts to hydrology and water quality are evaluated based on the proposed project's adherence to local, regional, State, and federal standards; the proposed land uses and project design; changes in pre- and post-project stormwater flows; and proposed BMPs for control of surface runoff and reduction of pollutants in stormwater runoff.

4.9.5 Thresholds of Significance

The thresholds for impacts related to hydrology and water quality used in this analysis are derived from Appendix G of the *State CEQA Guidelines*. The proposed project may be deemed to have a significant impact with respect to hydrology and water quality if it would:

Threshold 4.9.1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

Threshold 4.9.2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

Threshold 4.9.3: 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: (i) Result in substantial erosion or siltation on or off site; (ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site; (iii) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or (iv) Impede or redirect flood flows;

Threshold 4.9.4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

Threshold 4.9.5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.9.6 Project Impacts

As discussed in Section 3.10 of the Initial Study (**Appendix B**), although a portion of the project site, containing Trabuco Creek, is mapped as being within a Regulatory Floodway, no development is proposed in this area and the approximately 14-acre existing conservation covenant encompassing Trabuco Creek, an unnamed tributary to Trabucco Creek, and both banks of each water body would be maintained. Development of proposed structures would be set back from the covenant boundary by an approximately 100-foot buffer. Therefore, the proposed project would not impede or redirect flood flows at the project site (Threshold 4.9.3(iv)). In addition, because the project site is not within a tsunami or seiche zone and no construction or development is proposed within the Regulatory Floodway, implementation of the proposed project would not result in the release of pollutants from a flood, dam inundation, tsunami, or seiche (Threshold 4.9.4). Therefore, these topics are not discussed further in this Draft EIR.

Threshold 4.9.1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: The proposed project would develop the project site with the Legacy Ranch, which would consist of seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core. Each core would incorporate community amenities such as an equestrian center for horses and cattle, a chapel and an event barn for wedding ceremonies and events, a working agricultural farm, farm shop, instructional classes, wellness activities, and recreational trails. The proposed project also includes the preservation of the existing uses on the project site, including the Putuidem Village, Swanner House, and Dr. John Cortese Dog Park, and would provide greater access to each of these existing elements.

Construction. Pollutants of concern during construction include pathogens, nutrients (phosphorous and nitrogen), sediment, metals, oil and grease, trash/debris, pesticides/herbicides, and organic compounds. Each of these pollutants, on its own or in combination with other pollutants, can have a detrimental effect on water quality. During soil-disturbing construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via stormwater runoff into receiving waters. Sediment from increased soil erosion and chemicals from spills and leaks also have the potential to be discharged to downstream receiving waters during storm events, which can affect water quality and impair beneficial uses. Any of these pollutants have the potential to be transported via stormwater runoff into receiving waters (i.e., Trabuco Creek, San Juan Creek, and the Pacific Ocean).

According to the Drainage Study, construction of the proposed project is anticipated to disturb approximately 44.61 acres of soil. As such, the proposed project would be subject to the requirements of the Construction General Permit. The proposed project would also be required to

comply with the City's Municipal Code Sections 8-2.15, 8-2.16, and 8-14.107, which require preparation of a pollution control plan, construction BMP plan, and/or erosion and sediment control plan. As specified in **Regulatory Compliance Measure HYD-1,** and as required by the Construction General Permit, the Construction Contractor would prepare a SWPPP and implement Construction BMPs detailed in the SWPPP during construction activities. In addition, as specified in **Regulatory Compliance Measure HYD-2,** and as required by the City's Municipal Code, a pollution control plan, construction BMP plan, and/or erosion and sediment control plan would be prepared and submitted to the City's Building Official prior to issuance of a grading or building permit. The SWPPP and pollution control plan, construction BMP plan, and/or erosion and sediment control plan would detail the BMPs to be implemented during construction. Construction BMPs would include, but not be limited to, erosion and sediment control (designed to minimize erosion and retain sediment on site), and good housekeeping practices to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. The Construction General Permit and City Municipal Code also require inspection and maintenance of construction BMPs prior to, during, and after rain events.

Regulatory Compliance Measure HYD-1

Construction General Permit. Prior to issuance of a grading permit, the Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002* (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Stormwater Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). As required by the Section 8-14.107 of the City of San Juan Capistrano's (City) Municipal Code, construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained for the project from the SMARTS and provided to the City of San Juan Capistrano Building Official, or designee, to demonstrate that coverage under the Construction General Permit has been obtained. Project construction shall comply with all applicable requirements specified in the Construction General Permit, including but not limited to, preparation of a SWPPP and implementation of construction site

	Best Management Practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the project. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and shall include BMPs (e.g., Sediment Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in stormwater runoff. Construction Site BMPs shall also conform to the requirements specified in the latest edition of the Orange County Stormwater Program *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* to control and minimize the impacts of construction and construction related activities, materials, and pollutants on the watershed. Upon completion of construction activities and stabilization of the project site, a Notice of Termination shall be submitted via SMARTS.
Regulatory Compliance Measure HYD-2	**Erosion and Sediment Control Plans.** In compliance with the requirements of Sections 8-2.15, 8-2.16, and 8-14.107 of the San Juan Capistrano Municipal Code, the project Applicant shall submit a pollution control plan, construction BMP plan, and/or erosion and sediment control plan to the City of San Juan Capistrano Building Official, or designee, for review and approval prior to issuance of a grading permit. The project Applicant shall also install and maintain erosion control devices year-round in compliance with the City-approved pollution control plan, construction BMP plan, and/or erosion and sediment control plan. The project Applicant shall ensure that the construction BMPs are inspected and maintained prior to, during, and after rain events.

In addition, according to the Geotechnical Investigation, groundwater was encountered in drill holes at the project site between 39.8 and 53.8 feet bgs. Although the Geotechnical Investigation notes that this is not in general agreement with the depth of historically high groundwater provided in the Seismic Hazard Zone Report for the San Juan Capistrano Quadrangle, which indicates that historic high groundwater is five feet bgs, the Geotechnical Investigation determined that groundwater at depths of five feet bgs is very unlikely to occur on site. In addition, Trabuco Creek runs through the southern portion of the project site and exerts influence on groundwater levels near the creek.

Therefore, the likely high groundwater condition is a groundwater table drawn at a two percent slope that rises from Trabuco Creek, resulting in a design groundwater depth of approximately 35 feet bgs. Excavation at the project site during construction of the proposed project is anticipated to extend to a maximum depth of 10 feet bgs. As the design groundwater depth for the project site is approximately 35 feet bgs, groundwater dewatering is not anticipated to be required during construction.

With adherence to **Regulatory Compliance Measures HYD-1** and **HYD-2**, including preparation of a SWPPP; a pollution control plan, construction BMP plan, and/or erosion and sediment control plan; implementation of Construction BMPs, and the treatment of groundwater prior to discharge (if necessary), impacts associated with the violation of water quality standards or waste discharge requirements during project construction would be **less than significant**. No mitigation is required.

Operation. During operation, anticipated pollutants of concern associated with the proposed project include suspended solids, nutrients, heavy metals, bacteria/virus/pathogens, pesticides, oil and grease, toxic organic compounds, trash and debris, and dry weather runoff. In particular, equestrian uses would generate waste products, which can contain pollutants such as bacteria, nutrients, chemicals, and other harmful substances. If not properly managed, these pollutants could be transported into receiving water bodies through stormwater runoff.

As previously discussed, the City is a co-permittee under the San Diego RWQCB's Regional MS4 Permit, which requires the preparation of project-specific WQMPs for new development and significant redevelopment projects that qualify as Priority Development Projects and the implementation of Site Design, Source Control, and LID BMPs. As provided in the Preliminary WQMP, implementation of the proposed project would increase the impervious surface area at the project site from approximately 0.5 acre (21,780 square feet) to approximately 4.7 acres (204,732 square feet). Therefore, the proposed project is considered a Priority Development Project because it would create and/or replace 5,000 square feet or more of impervious surface at the project site. As specified in **Regulatory Compliance Measure HYD-3** and required by the Regional MS4 Permit, the Applicant would be required to prepare a Final WQMP and implement the BMPs detailed in the Final WQMP. The Final WQMP would specify the Site Design, Source Control, and LID BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff.

A Preliminary WQMP has been prepared for the proposed project, in compliance with the Regional MS4 Permit, that details the Site Design, Source Control, and LID BMPs that would be implemented to reduce impacts to water quality from operation of the proposed project. According to the WQMP, the following Site Design and Source Control BMPs would be implemented during operation:

- **Site Design BMPs:** Minimize impervious area; maximize natural infiltration capacity; preserve existing drainage patterns and time of concentration; disconnect impervious areas; protect existing vegetation and sensitive areas; revegetate disturbed areas; soil stockpiling and site generated organizes; firescaping, and water efficient landscaping.

- **Non-Structural Source Control BMPs:** Education for property owners, tenants, and occupants; activity restrictions; common area landscape management; BMP maintenance; common area

litter control; employee training; common area catch basin inspection; street sweeping private streets and parking lots.

- **Structural Source Control BMPs:** Provide storm drain system stenciling and signage; design and construct trash and waste storage areas to reduce pollution introduction; use efficient irrigation systems and landscape design, water conservation, smart controllers, and source control; protect slopes and channels and provide energy dissipation; incorporate requirements applicable to individual priority project categories; hillside landscaping; and wash water control for food preparation areas.

In addition, the proposed project would generally maintain existing drainage pattens at the project site and would include LID BMPs, including 17 bioretention areas to capture and treat stormwater runoff before infiltrating at the project site. The bioretention areas and infiltration basins would be designed to retain the design capture volume (DCV) of stormwater runoff and accommodate Regional MS4 Permit hydromodification requirements. Overflows from the bioretention areas (i.e., flows greater than the DCV and hydromodification requirement) would be directed to a separate infiltration basin for infiltration. Infiltration of stormwater could have the potential to affect groundwater quality. As discussed above, the proposed project includes Site Design, Source Control, and LID BMPs, including bioretention areas. Furthermore, when stormwater is infiltrated, soil and plants absorb and filter pollutants and reduce the potential for pollutants of concern to reach groundwater. As specified in **Regulatory Compliance Measure HYD-3**, a Final WQMP would be prepared in compliance with the Regional MS4 Permit prior to or during final design, which would ensure that the proposed project design would adequately target pollutants of concern in stormwater runoff before infiltrating into the soil. In addition, as specified in **Regulatory Compliance Measure HYD-4**, the Applicant would be required to prepare a Final Hydrology and Hydraulics Analysis to confirm that the proposed on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded.

Regulatory Compliance Measure HYD-3

Water Quality Management Plan. Prior to issuance of grading or building permits, the project Applicant shall submit a Final Water Quality Management Plan (WQMP) to the City of San Juan Capistrano City Engineer, or designee, for review and approval in compliance with Sections 8-14.105 and 8-14.106 of the City Municipal Code and the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region (South Orange County MS4 Permit), Order R9-2013-0001, NPDES No. CAS6010266, as amended by Order No. R9-2015-0001, or any other subsequent permit. The Final WQMP shall be prepared consistent with the requirements of the

	Model Water Quality Management Plan (Model WQMP) for South Orange County (County of Orange 2017) and the Technical Guidance Document for the Preparation of Conceptual/ Preliminary and/or Project Water Quality Management Plans (WQMPs) (County of Orange 2018), or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project site. The City of San Juan Capistrano Building Official and City Engineer, or designees, shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design.
Regulatory Compliance Measure HYD-4	**Final Hydrology and Hydraulics Analysis.** Prior to issuance of grading or building permits, the project Applicant shall submit Final Hydrology and Hydraulics Analysis to the City of San Juan Capistrano City Engineer, or designee, for review and approval. The Final Hydrology and Hydraulics Analysis shall be prepared consistent with the requirements of the *Orange County Hydrology Manual* and the *Orange County Hydrology Manual Addendum No. 1*, or subsequent guidance manuals. The Final Hydrology and Hydraulics Analysis shall confirm that the on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded. The City of San Juan Capistrano Building Official and City Engineer, or designees, shall ensure that the drainage facilities specified in the Final Hydrology and Hydraulics Analysis are incorporated into the final project design.

The proposed project would include the Equestrian Core, focused on equine activities. Although horse waste, such as manure, urine and soiled bedding, are organic, biodegradable materials, many of their physical, biological, and chemical properties, including sediment, phosphorous, nutrients, and bacteria, can be detrimental to water quality and can adversely affect human health and aquatic life in water bodies. In addition, many of the nutrients ingested by horses return to the environment in feces and urine. When transported by stormwater runoff to downstream receiving water bodies, excessive amounts of these nutrients can stimulate unwanted algae blooms in creeks and streams, causing a decrease in dissolved oxygen in water, which stifles aquatic life. Further, some equestrian activities, such as trail riding, may remove the soil's vegetative cover and can expose the soil surface,

leading to potential erosion and siltation impacts. Bacteria, such as fecal coliform, is also present in horse manure, and is listed as a pollutant of concern because it is an indicator of potential viruses and pathogens that cause swimmer-associated sickness in water bodies. Lastly, chemicals used during horse grooming and shelter/living area maintenance may cause adverse health effects to humans and are toxic to aquatic life. As such, the proposed project would also be required to properly manage proposed equestrian activities, including proper management of horse waste, in order to prevent associated pollutants from entering the stormwater system and downstream receiving waters, consistent with the equestrian-related water quality BMPs provided by the Orange County Public Works Department.[26]

The equestrian-related water quality BMPs were developed as a cooperative effort among private and public entities in Orange and San Diego Counties in compliance with the NPDES permit issued by the Santa Ana and San Diego RWQCBs. As detailed in **Mitigation Measure HYD-1**, equestrian activities would be required to adhere to BMPs related to grooming, and collection, storage, and disposal of waste in order to ensure that pollutants from equestrian uses are not transported into receiving water bodies via stormwater runoff.

Mitigation Measure HYD-1

Equestrian-Related Water Quality Best Management Practices (BMPs). To protect surface water and stormwater quality and to minimize the potential for pollutant discharges associated with equestrian activities, the Applicant shall implement and maintain Horse Care Best Management Practices (BMPs) consistent with guidance from the Orange County Public Works Department. BMPs shall include, but are not limited to, the following:

1. **Grooming and Washing**

    - Horses shall be washed only in areas that drain to the sanitary sewer, a vegetated area, or over gravel surfaces designed to prevent runoff to storm drains or waterbodies.

    - Water use during washing shall be minimized through the use of spray nozzles with automatic shutoff valves, and water shall be turned off when not actively in use.

    - Wash areas shall be elevated or otherwise designed to prevent runoff from contacting surrounding ground surfaces.

[26] Orange County Public Works. 2004. *Equestrian-Related Water Quality Best Management Practices.* June.

- All horse care products shall be used in accordance with manufacturer instructions, and chemical spills shall be cleaned immediately to prevent entry into the storm drain system.

2. **Manure Collection, Storage, and Disposal**

   - Horse manure shall be swept or shoveled daily from holding areas rather than washed down.

   - Manure storage areas shall be located away from storm drains and waterbodies, sloped away from drainage pathways, and enclosed or covered to prevent runoff during rainfall.

   - Manure and soiled bedding shall be composted or properly disposed of through licensed waste haulers or transported to approved composting or recycling facilities.

3. **Buffer Areas and Facility Design**

   - Vegetated buffer strips shall be installed and maintained between corrals, paddocks, manure storage areas, and nearby waterways.
   - Any new or reconstructed equestrian facilities shall be designed in accordance with applicable County facility design standards to minimize runoff and pollutant discharges.

These BMPs shall be implemented prior to initiation of equestrian operations and shall be maintained for the life of the project. Consistent with Sections 8-14.109 and 8-14.110 of the City's Municipal Code, these BMPs would be subject to City inspection and enforcement to ensure long-term compliance.

With adherence to **Regulatory Compliance Measures HYD-3** and **HYD-4**, which require adherence to the Regional MS4 Permit, including preparation of a Final WQMP to address pollutants of concern in stormwater runoff and Final Hydrology and Hydraulics Analysis to ensure that the proposed on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff, and implementation of **Mitigation Measure HYD-1,** which

requires the implementation of equestrian-related BMPs, potential impacts associated with the violation of water quality standards or waste discharge requirements during operation of the proposed project would be **less than significant with mitigation incorporated**.

Overall, with adherence to **Regulatory Compliance Measures HYD-1** through **HYD-4**, and implementation of **Mitigation Measure HYD-1,** the proposed project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality, during construction or operation. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.9.2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact.

Discussion of Effects: As previously discussed, the project site lies within the boundaries of the San Juan Valley Groundwater Basin and groundwater was encountered in drill holes at the project site between 39.8 and 53.8 feet bgs.

Construction. Excavation at the project site during construction of the proposed project is anticipated to extend to a maximum depth of 10 feet bgs. As the design groundwater depth for the project site is approximately 35 feet bgs, groundwater dewatering is not anticipated to be required during construction. Furthermore, soil compaction would be minimized during construction by using designed access routes, avoiding areas that would not be developed/disturbed, and scheduling grading and earthwork during dry weather conditions to avoid compaction of wet soils. Minimizing soil compaction during construction activities would promote natural infiltration during construction activities, and the proposed project would maximize natural infiltration capacity at the project site. Therefore, construction impacts related to a decrease in groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be **less than significant**, and no mitigation is required.

Operation. Currently, the project site is developed with the Swanner House, the Dr. Joe Cortese Dog Park, and Putuidem Village, with the remainder of the project site consisting of pervious surfaces. Implementation of the proposed project would increase impervious surface coverage on the project site compared to existing conditions due to the construction of the proposed project, which would decrease on-site infiltration. However, the majority of the project site would remain pervious and stormwater would still be able to infiltrate at the project site and within Trabuco Creek.

Implementation of the proposed project would increase impervious surface coverage on the project site compared to existing conditions due to the construction of the proposed project, which would decrease on-site infiltration. However, as described above under Threshold 4.9.1, the proposed project would include bioretention areas and infiltration basins in accordance with the Regional MS4 Permit, which would facilitate infiltration of stormwater at the project site and groundwater recharge. Therefore, implementation of the proposed project would not interfere substantially with

groundwater recharge such that the project may impede sustainable groundwater management of the basin, and impacts would be **less than significant**.

As discussed in Section 4.13, Utilities and Service Systems, water service to the project site would be provided by Santa Margarita Water District (SMWD). The SMWD receives water from four sources to meet its total water demand, including imported drinking water from the Metropolitan Water District of Southern California (MWD) and Municipal Water District of Orange County (MWDOC), treated wastewater, non-potable urban return flows, and purchased non-potable groundwater.[27] Imported drinking water comes from the Colorado River Aqueduct, which is a 242-mile water conveyance system that brings water from the Colorado River to Lake Mathews in Riverside County, and the State Water Project (SWP), which is the longest aqueduct system in the world and transports water from the Bay-Delta in Northern California to Southern California. Purchased non-potable groundwater comes from the Rancho Mission Viejo Mutual Water Company and Santa Margarita Valley Groundwater Basin. Currently, the SMWD does not extract groundwater from the San Juan Valley Groundwater Basin; however, the SMWD may develop the San Juan Watershed Project, which would provide an additional reliable drinking water supply from the San Juan Valley Groundwater Basin.[28]

Both the San Juan Valley Groundwater Basin and the Santa Margarita Valley Groundwater Basin are identified by the Department of Water Resources as very low priority basins.[29] Therefore, a Groundwater Sustainability Plan is not required for this basin. Groundwater from the Santa Margarita Valley Groundwater Basin provides the city with non-potable groundwater supply and the City may develop the San Juan Watershed Project to provide an additional reliable drinking water supply from the San Juan Valley Groundwater Basin. SMWD adopted their 2020 Urban Water Management Plan (UWMP) in June 2021, which provides a framework for long-term water planning and informs the public of SMWD's plans for long-term resource planning to ensure adequate water supplies for existing and future demands.[30] According to the 2020 UWMP, SMWD's water use in 2020 (potable, raw, and recycled) totaled 30,083 acre-feet (af), with single-family residential uses accounting for approximately 14, 057 af (60 percent) of the total potable water use.[31] In addition, according to the 2020 UWMP, SMWD's water use (potable, raw, and recycled) is projected to be 36,898 af in 2030, 40,853 af in 2035, 40,341 af in 2040, and 40,168 in 2045.[32] In addition, the 2020 UWMP indicates that SMWD's water supplies are projected to meet full-service demands now and

27 Santa Margarita Water District (SMWD). 2021. *2020 Urban Water Management Plan*. June.
28 Ibid.
29 California Department of Water Resources (DWR). n.d.-c. SGMA Basin Prioritization Dashboard. <https://gis.water.ca.gov/app/bp-dashboard/final/> (accessed) July 2025).
30 Santa Margarita Water District (SMWD). 2021. *2020 Urban Water Management Plan.* June.
31 Santa Margarita Water District (SMWD). 2021. *2020 Urban Water Management Plan*, Table 4-1 Retail: Use for Potable – 2020 ACTUAL and Table 4-3 Retail: Total Gross Water Use (Potable and Non-Potable (AF). June.
32 Santa Margarita Water District (SMWD). 2021. *2020 Urban Water Management Plan*, Table 4-3 Retail: Total Gross Water Use (Potable and Non-Potable (AF). June.

into the future. Further, MWD's 2020 UWMP confirms that MWD can meet the projected full-service demands of its member agencies during normal years, single dry year, and multiple dry years.[33]

In addition, as discussed in Section 4.13, Utilities and Service Systems, the proposed project's anticipated water demand is approximately 53,238,482 gallons per year (gpy) (163 acre-feet per year [afy]). This represents a negligible percentage of SMWD's projected service-wide annual water demand. As discussed in Section 4.13, Utilities and Service Systems, Section 10912 of the California Water Code requires a Water Supply Assessment (WSA) for projects that would generate a water use demand equivalent to 500 dwelling units. The SMWD uses a planner factor of 450 gpd for single family dwelling units and 175 gpd for multifamily units.[34] Using these demand assumptions, 500 single family dwelling units would generate a water demand of approximately 82,125,000 gpy (252 afy) and 500 multifamily dwelling units would generate a water demand of approximately 31,937,500 gpy (98 afy). The proposed project's anticipated water demand would not exceed the water use demand equivalent for 500 single family dwelling units; however, it would exceed the water use demand equivalent for 500 multifamily dwelling units. However, it should be noted that the proposed project's anticipated water demand provided above was determined using default water demand estimates from CalEEMod for specific land uses. Because CalEEMod does not include land use types specific to horse barns, veterinary barns, amenities buildings, or agricultural and event barns, alternative land use types were selected to ensure conservative estimates. The proposed food service area and catering building were modeled using the *High Turnover (Sit-Down Restaurant)* category, which represents higher-intensity use relative to the proposed use. Similarly, *Medical Office Building* and *General Office Building* land use types were applied to represent the horse barn, veterinary barn, and agricultural event barn. These land use types are also more intensive than the agricultural and livestock-related structures included in the proposed project, which would have substantially lower demands and more limited occupancy. Use of these higher-intensity land use types therefore provides a conservative basis for estimating operational demand estimates and operation of the proposed project is anticipated to result if far less water demand than reported by CalEEMod. Therefore, a project-specific WSA is not required.

Furthermore, SMWD's projected water demand accounts for projected growth within the region as identified by the City's General Plan. As the proposed project is consistent with the General Plan designation for the project site, the proposed project's water demand has been accounted for in the City's water supply and demand estimates. Because SMWD has sufficient water supplies to meet current and future development within the city, as indicated in SMWD's UWMP and the proposed project's water demand has been accounted for in the City's water supply and demand estimates, the proposed project's water demand would not deplete groundwater supplies. Therefore, operational impacts related to a decrease in groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be less than significant, and no mitigation is required.

Overall, implementation of the proposed project would not deplete groundwater supplies or interfere with groundwater recharge during construction or operation such that the proposed

[33] Santa Margarita Water District (SMWD). 2021. *2020 Urban Water Management Plan*. June.
[34] Ibid.

project may impede sustainable groundwater management. Impacts associated with groundwater supply and recharge would be **less than significant,** and no mitigation is required.

Threshold 4.9.3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on or off site; (ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site; or (iii) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Under existing conditions, the natural drainage at the project site is generally toward the south and southeast to discharge into Trabuco Creek, conforming to the natural topography. Within the project site and in the vicinity of the project site, Trabuco Creek exists in its natural state with earthen banks. Approximately 0.9 mile south of the project site, Trabuco Creek becomes channelized before discharging into San Juan Creek, approximately 2.1 miles south of the project site. San Juan Creek is a flood-control channel that directs stormwater southwest and discharges into the Pacific Ocean at Doheny State Beach via Capistrano Bight.

Implementation of the proposed project would not change or add any runoff discharge points to Trabuco Creek. Existing natural areas adjacent to Trabuco Creek would continue to drain into the creek via surface sheet flow and all developed areas of the project site (i.e. building footprints) would drain to bioretention areas. Overflows from the bioretention areas would then discharge to separate infiltration basins to be infiltrated at the project site. With implementation of the proposed project, the project site would be divided into 17 drainage management areas (DMAs) to manage stormwater runoff from the entire project site, as discussed below.

- **DMA 1** would be approximately 0.138 acre (6,000 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed catering facility within the Agricultural Core. Stormwater runoff from impervious areas within DMA 1 would flow to a vegetated bioretention area located within DMA 1.

- **DMA 2** would be approximately 0.069 acre (3,000 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed agricultural barn within the Agricultural Core. Stormwater runoff from impervious areas within DMA 2 would flow to a vegetated bioretention area located within DMA 2.

- **DMA 3** would be approximately 0.143 acre (6,230 square feet) and would manage stormwater runoff from the portion of the project site that includes the existing Swanner House and proposed event space within the Swanner House Core. Stormwater runoff from impervious areas within DMA 3 would flow to a vegetated bioretention area located within DMA 3.

- **DMA 4** would be approximately 0.041 acre (1,800 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed farm shop within the

Agricultural Core. Stormwater runoff from impervious areas within DMA 4 would flow to a vegetated bioretention area located within DMA 4.

- **DMA 5** would be approximately 0.257 acre (11,195 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed chapel and ranch house within the Chapel Core. Stormwater runoff from impervious areas within DMA 5 would flow to a vegetated bioretention area located within DMA 5.

- **DMA 6** would be approximately 0.503 acre (21,920 square feet) and would manage stormwater runoff from the portion of the project site that includes the two proposed main barns within the Equestrian Core. Stormwater runoff from impervious areas within DMA 6 would flow to a vegetated bioretention area located within DMA 6.

- **DMA 7** would be approximately 0.045 acre (1,963 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed uncovered riding pen within the Equestrian Core. Because DMA 7 is essentially entirely pervious, a small perimeter berm would be constructed to make DMA 7 a self-containing area for the 25-year, 24-hour storm event volume and stormwater runoff would be infiltrated within DMA 7.

- **DMA 8** would be approximately 0.023 acre (981 square feet) and would manage stormwater runoff from the portion of the project site that includes the existing pump house located between the existing Putuidem Village and the Equestrian Core. Stormwater runoff from impervious areas within DMA 8 would flow to a vegetated bioretention area located within DMA 8.

- **DMA 9** would be approximately 1.205 acres (52,500 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed covered riding arena within the Equestrian Core. Stormwater runoff from impervious areas within DMA 9 would flow to a vegetated bioretention area located within DMA 9.

- **DMA 10** would be approximately 0.771 acre (33,600 square feet) and would manage stormwater runoff from the portion of the project site that includes the smaller proposed uncovered horse riding arena within the Equestrian Core. Because DMA 10 is essentially entirely pervious, a small perimeter berm would be constructed to make DMA 10 a self-containing area for the 25-year, 24-hour storm event volume and stormwater runoff would be infiltrated within DMA 10.

- **DMA 11** would be approximately 0.045 acre (1,963 square feet) and would manage stormwater runoff from the portion of the project site that includes the second proposed uncovered riding pen within the Equestrian Core. Because DMA 11 is essentially entirely pervious, a small perimeter berm would be constructed to make DMA 11 a self-containing area for the 25-year, 24-hour storm event volume and stormwater runoff would be infiltrated within DMA 11.

- **DMA 12** would be approximately 0.685 acre (29,832 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed Otra Mas barn, equestrian caretaker residence, and the two smaller barns within the Equestrian Core. Stormwater runoff

from impervious areas within DMA 12 would flow to a vegetated bioretention area located within DMA 12.

- **DMA 13** would be approximately 0.046 acre (2,002 square feet) and would manage stormwater runoff from the portion of the project site that includes one of the proposed event barn within the Event Barn Core. Stormwater runoff from impervious areas within DMA 13 would flow to a vegetated bioretention area located within DMA 13.

- **DMA 14**would be approximately 0.083 acre (3,600 square feet) and would manage stormwater runoff from the portion of the project site that includes the second proposed event barn within the Event Barn Core. Stormwater runoff from impervious areas within DMA 14 would flow to vegetated bioretention areas located within DMA 14.

- **DMA 15** would be approximately 0.230 acre (10,000 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed community building within the Community Building Core. Stormwater runoff from impervious areas within DMA 15 would flow to a vegetated bioretention area located within DMA 15.

- **DMA 16** would be approximately 0.022 acre (960 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed food service area between the existing Dr Joe Cortese Dog Park and Putuidem Village. Stormwater runoff from impervious areas within DMA 16 would flow to a vegetated bioretention area located within DMA 16.

- **DMA 17** would be approximately 0.057 acre (2,500 square feet) and would manage stormwater runoff from the portion of the project site that includes the proposed patio area within the Event Barn Core. Stormwater runoff from impervious areas within DMA 17 would flow to a vegetated bioretention area located within DMA 17.

The bioretention areas would be designed to retain the Design Capture Volume (DCV) of stormwater runoff for the respective DMAs and would accommodate Regional MS4 Permit hydromodification requirements. Overflows from the bioretention areas (i.e., flows greater than the DCV and hydromodification requirement) within DMAs 1 through 6 and DMA 12 would be directed to separate infiltration basins, located throughout the project site and adjacent to the proposed bioretention areas, for infiltration. Overflows from DMAs 8, 9, 13, 14, 16, and 17 would be directed to the adjacent open space area to be infiltrated.

In addition, according to the Drainage Report, peak flow rates contributing to Trabuco Creek (i.e., stormwater runoff from the natural areas that would continue to discharge to the creek) would be reduced with implementation of the proposed project.

Threshold 4.9.3(i): Would the project result in substantial erosion or siltation on or off site?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects:

Construction. During construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above under Threshold 4.9.1, and as specified in **Regulatory Compliance Measure HYD-1**, the Applicant would be required to obtain coverage under the Construction General Permit, which requires preparation of a SWPPP. In addition, as specified in **Regulatory Compliance Measure HYD-2,** and as required by the City's Municipal Code, a pollution control plan, construction BMP plan, and/or erosion and sediment control plan would be prepared and submitted to the City's Building Official prior to issuance of a grading or building permit. The SWPPP and pollution control plan, construction BMP plan, and/or erosion and sediment control plan would detail Erosion Control and Sediment Control BMPs to be implemented during construction to minimize erosion and retain sediment on site.

With compliance with the requirements of the Construction General Permit and the City's Municipal Code, including implementation of Construction BMPs, construction impacts related to substantial soil erosion or the loss of topsoil would be **less than significant**, and no mitigation is required.

Operation. Implementation of the proposed project would increase the amount of impervious surface area on the project site from approximately 0.5 acre (21,780 square feet) to approximately 4.7 acre (204,732 square feet), which would increase the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters. In addition, as discussed above, some equestrian activities could remove the soil's vegetative cover and expose the soil surface, leading to potential erosion and siltation impacts.

However, the impervious surface areas on the project site would not be prone to on-site erosion or siltation because there would be no exposed soil. The remaining pervious surfaces on the project site would be maintained the same as existing conditions or landscaped with vegetation that would stabilize the soil and promote infiltration, thereby minimizing on-site erosion and siltation. Furthermore, the proposed project would be required to adhere to **Regulatory Compliance Measure HYD-3** and implement **Mitigation Measure HYD-1. Regulatory Compliance Measure HYD-3** requires the preparation of a Final WQMP in compliance with the Regional MS4 permit and the implementation of Site Design, Source Control, and LID BMPs that minimize stormwater runoff thereby minimizing on-site erosion and siltation, and **Mitigation Measure HYD-1** requires the implementation of equestrian-related BMPs that would help minimize erosion impacts. With adherence to **Regulatory Compliance Measure HYD-3** and implementation of **Mitigation Measure HYD-1**, operational impacts related to on-site or off-site erosion or siltation would be **less than significant with mitigation incorporated**.

In addition, according to the Drainage Report, peak flow rates contributing to Trabuco Creek (i.e., stormwater runoff from the natural areas that would continue to discharge to the creek) would be

reduced with implementation of the proposed project. Therefore, this continued discharge to Trabuco Creek would not result in substantial erosion or siltation associated with Trabuco Creek.

Overall, with adherence to **Regulatory Compliance Measures HYD-1** through **HYD-3**, and implementation of **Mitigation Measure HYD-1,** the proposed project would not result in substantial erosion or siltation on or off site. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.9.3(ii): Would the project substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

Less Than Significant Impact.

Discussion of Effects:

Construction. As discussed above under Threshold 4.9.1, project construction would comply with the requirements of the SWRCB Construction General Permit (**Regulatory Compliance Measure HYD-1**), which require preparation of a SWPPP that would specify Construction BMPs to control and direct on-site surface runoff to ensure that project construction does not increase the rate or amount of surface runoff or impede or redirect flood flows in manner that would result in on-site or off-site flooding. With implementation of Construction BMPs, construction impacts related to a substantial increase in the rate or amount of surface runoff or impeding or redirecting flood flows in a manner that would result in on-site or off-site flooding would be **less than significant**, and no mitigation is required.

Operation. As stated under Threshold 4.9.3(i) above, development of the proposed project would increase the total impervious surface area at the project site, which would increase stormwater runoff and could potentially result in flooding. However, as discussed above, the proposed LID BMPs (bioretention areas and infiltration basins), would capture and treat stormwater runoff consistent with the requirements of the Regional MS4 Permit (**Regulatory Compliance Measure HYD-3**). In addition, the Applicant would be required to prepare a Final Hydrology and Hydraulics Analysis to confirm that the proposed on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded (**Regulatory Compliance Measure HYD-4**).

Compliance with **Regulatory Compliance Measures HYD-3** and **HYD-4** would ensure that operational activities would not result in a substantial increase in the rate or amount of surface runoff in a manner that would result in on- or off-site flooding. Impacts would be **less than significant**, and no mitigation is required.

Threshold 4.9.3(iii): Would the project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects:

Construction. As discussed above under Threshold 4.9.1, project construction would comply with the requirements of the Construction General Permit and the City's Municipal Code (**Regulatory Compliance Measures HYD-1** and **HYD-2**), which require preparation of a SWPPP and a pollution control plan, construction BMP plan, and/or erosion and sediment control plan. These plans would specify Construction BMPs to control and direct on-site surface runoff to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage system and does not discharge polluted runoff during construction activities. With adherence to **Regulatory Compliance Measures HYD-1** and **HYD-2**, construction impacts related to exceeding the capacity of the stormwater drainage system or additional polluted runoff would be **less than significant**, and no mitigation is required.

Operation. As previously discussed, the project site is currently developed with the Swanner House, the Dr. Joe Cortese Dog Park, and Putuidem Village and stormwater at the project site either infiltrates at the project site or sheet flows southeast to discharge to Trabuco Creek under existing conditions. With implementation of the proposed project, existing natural areas adjacent to Trabuco Creek would continue to drain into the creek via surface sheet flow and all developed areas of the project site (i.e. building footprints) would drain to bioretention areas and be infiltrated at the project site. As the majority of stormwater runoff from the proposed project would be infiltrated at the project site, the proposed project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. In addition, according to the Drainage Report, peak flow rates contributing to Trabuco Creek (i.e., stormwater runoff from the natural areas that would continue to discharge to the creek) would be reduced with implementation of the proposed project. Therefore, impacts related to exceeding the capacity of existing or planned stormwater drainage systems would be **less than significant**, and no mitigation is required.

In addition, as previously discussed, the proposed project would include LID BMPs (i.e., bioretention areas and infiltration basins), as required by the Regional MS4 Permit, to reduce pollutants of concern in stormwater runoff (**Regulatory Compliance Measure HYD-3**). In addition, the Applicant would be required to prepare a Final Hydrology and Hydraulics Analysis to confirm that the proposed on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded (**Regulatory Compliance Measure HYD-4**). Therefore, stormwater runoff would not exceed the capacity of the existing stormwater system pursuant to the requirements of Regional MS4 Permit. In addition, with adherence to **Regulatory Compliance Measures HYD-3** and **HYD-4** and implementation of **Mitigation Measure HYD-1**, which requires the implementation of equestrian-related water quality BMPs, operational impacts related to the creation or contribution of stormwater runoff that would provide substantial additional sources of polluted runoff would be **less than significant with mitigation incorporated**.

Overall, with adherence to **Regulatory Compliance Measures HYD-1** through **HYD-4** and implementation of **Mitigation Measure HYD-1**, the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.9.5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: The project site is within the jurisdiction of the San Diego RWQCB. The San Diego RWQCB adopted the Basin Plan in September 1994 (updated September 2021), that designates beneficial uses for all surface and groundwater within its jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses.[35] The proposed project would comply with the Construction General Permit and the existing Regional MS4 Permit, as detailed in **Regulatory Compliance Measures HYD-1** and **HYD-3**, which require preparation of a SWPPP, testing and treatment (if necessary) of groundwater prior to discharge to the surrounding area, preparation of a Final WQMP, and implementation of construction and operational BMPs to reduce pollutants of concern in stormwater runoff. In addition, the proposed project would be required to implement **Mitigation Measure HYD-1**, which requires the implementation of equestrian-related water quality BMPs to minimize water quality impacts from the proposed equestrian uses. Therefore, the proposed project would not result in water quality impacts that would conflict with the San Diego RWQCB Basin Plan. Impacts related to a conflict with or obstruction of the implementation of a water quality control plan would be **less than significant with mitigation incorporated**.

SGMA was enacted in September 2014. SGMA requires governments and water agencies located within high- and medium-priority groundwater basins to halt overdraft of the basins. SGMA requires the formation of local Groundwater Sustainability Agencies, which are required to adopt GSPs to manage the sustainability of the groundwater basins. The majority of the project site is located within the San Juan Valley Groundwater Basin. The San Juan Valley Groundwater Basin is identified by the Department of Water Resources as a very low priority basin;[36] therefore, development of a GSP or an approved GSP alternative is not required.

Although the proposed project would increase impervious surface area on the project site, which would decrease on-site infiltration, the proposed project would include LID BMPs (i.e., bioretention areas and infiltration basins) in accordance with the Regional MS4 Permit, which would facilitate infiltration of stormwater at the project site and groundwater recharge. Therefore, the proposed

35 California Regional Water Quality Control Board, San Diego Region. 2021. *Water Quality Control Plan for the San Diego Basin (9).* September 1.

36 California Department of Water Resources (DWR). n.d.-c. SGMA Basin Prioritization Dashboard. <https://gis.water.ca.gov/app/bp-dashboard/final/> (accessed) July 2025).

project would not substantially decrease on-site infiltration and groundwater recharge when compared to existing conditions.

Overall, with adherence to **Regulatory Compliance Measures HYD-1** and **HYD-3** and implementation of **Mitigation Measure HYD-1**, the proposed project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be **less than significant with mitigation incorporated**.

4.9.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guideline*s, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for hydrology and water quality. Because the project site is located within the San Juan Creek Watershed and stormwater runoff from the project site would discharge into water bodies within the San Juan Creek Watershed, the cumulative impact area for hydrology and water quality related to the proposed project is the San Juan Creek Watershed. Cumulative development in the San Juan Creek Watershed is a continuation of the existing urban pattern of development that has already resulted in extensive modifications to watercourses in the area. The area's watercourses have been either channelized or left in natural conditions, and drainage systems have been put into place to respond to the past urbanization that has occurred in this area. Other projects in the San Juan Creek Watershed could potentially increase the volume of stormwater runoff and contribute to pollutant loading in stormwater runoff reaching the storm drain system and nearby watercourses thereby resulting in cumulative impacts to hydrology and surface water quality. In addition, the construction and operation of these projects could result in localized degradation of groundwater quality that could eventually impair the underlying aquifer's continued use if pollutant discharge quantities are large enough. Cumulative impacts to groundwater supply could also occur due to increases in impervious surfaces that impair groundwater recharge and increases in consumptive uses of groundwater.

For the cumulative analysis related to hydrology and water quality, the cumulative projects being considered include the related projects within the same watershed as the proposed project (i.e., the San Juan Creek Watershed) and/or discharging to the same storm drain systems and receiving waters as the proposed project (i.e., Trabuco Creek, San Juan Creek, and the Pacific Ocean), including the projects provided in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures.

Past, present, and future projects, including those listed in **Table 4.A**, would be required to include construction and operational BMPs to reduce impacts to water quality and hydrology in compliance with local ordinances and plans adopted to comply with requirements of the various NPDES permits, and local plans and ordinances, including the City's Municipal Code, similar to the proposed project. Specifically, all projects that disturb one acre or more of soil must comply with the requirements of the Construction General Permit and new development and significant redevelopment projects that qualify as Priority Development Projects must comply with the requirements of the Regional MS4 Permit. The preparation and approval of a SWPPP (as required by the Construction General Permit) and incorporation of construction BMPs (as detailed in the SWPPP) would be required for each cumulative project to determine appropriate BMPs to minimize water quality impacts during

construction. In addition, cumulative projects that qualify as Priority Development Projects, as outlined in the Regional MS4 Permit would be required to comply with the requirements of the Regional MS4 Permit, including the preparation of a project-specific water quality management plan (WQMP) to specify BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff. In addition, cumulative projects would also be required to prepare a Final Hydrology and Hydraulics Analysis, as required by the Regional MS4 Permit, to confirm that the proposed on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded.

Past, present, and future projects would also be required to demonstrate compliance with applicable General Plan goals and policies related to the protection of water resources and water quality in the city. Moreover, the City reviews development projects on a case-by-case basis to ensure that sufficient local and regional drainage capacity is available.

All projects must also consider and address impacts to impaired receiving waters and TMDLs for receiving waters. The TMDL program is a cumulative approach to identifying all constituents that adversely affect the beneficial uses of water bodies and then identifying appropriate reductions in pollutant loads or concentrations from all sources so that the receiving waters can maintain/attain the beneficial uses in the Basin Plan. Thus, by complying with TMDLs, a project's cumulative impacts to overall surface water quality in the San Juan Creek Watershed is taken into account.

Regional programs and BMPs such as TMDL programs and the Regional MS4 Permit Program have been designed under an assumption that the San Juan Creek Watershed would continue its pattern of urbanization. The regional control measures contemplate the cumulative effects of proposed development. The proposed project would be required to comply with the requirements of the Construction General Permit and the Regional MS4 Permit and implement construction and operational BMPs to reduce pollutants in stormwater runoff. Compliance with these regional programs and permits constitutes compliance with programs intended to address cumulative water quality impacts. As stated above, each cumulative project would be required to develop a SWPPP, a WQMP, and prepare a project-specific hydrology and hydraulics analysis, as applicable, and would be evaluated individually to determine appropriate BMPs and treatment measures to reduce impacts to surface water quality and hydrology.

The CalTrout Trabuco Creek Fish Ladder Project, which includes the construction of engineered hydraulic fishway structures and channel improvements within Trabuco Creek in order to restore aquatic connectivity and remediate fish-passage barriers, would be developed within Trabuco Creek at and around the project site. Construction of the CalTrout Trabuco Creek Fish Ladder Project would likely include vegetation removal on the banks of Trabuco Creek and grading/site preparation activities, in addition to the use of construction equipment, which could result in hydrological and water quality impacts on Trabuco Creek. However, similar to the proposed project and other past, present, and future projects in the, the CalTrout Trabuco Creek Fish Ladder Project would be required to adhere to all applicable regulatory requirements (including NPDES permit and other San Diego RWQCB requirements) and would undergo environmental review that would identify potential impacts and prescribe mitigation, as necessary, to address potential significant impacts. As such,

implementation of the proposed project in combination with the CalTrout Trabuco Creek Fish Ladder Project would not result in significant cumulative impacts related to hydrology and water quality.

Overall, because the proposed project would include LID BMPs (i.e., bioretention areas and infiltration basins) that have been designed to maintain water quality, provide infiltration, and would comply with applicable NPDES requirements, the proposed project's potential impacts are less than cumulatively considerable. Likewise, other projects within the watershed and City would include BMPs to reduce the volume of stormwater runoff and pollutants of concern in stormwater runoff. Overall, the cumulative hydrology and water quality impacts of the proposed project and the cumulative projects would be **less than cumulatively considerable**.

4.9.8 Level of Significance Prior to Mitigation

Impacts related to hydrology and water quality would be potentially significant without implementation of mitigation.

4.9.9 Regulatory Compliance Measures and Mitigation Measures

4.9.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are applicable to the proposed project.

Regulatory Compliance Measure HYD-1

Construction General Permit. Prior to issuance of a grading permit, the Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002* (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Stormwater Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). As required by the Section 8-14.107 of the City of San Juan Capistrano's (City) Municipal Code, construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained for the project from the SMARTS and provided to the City of San Juan Capistrano Building Official, or designee, to demonstrate that coverage under the

	Construction General Permit has been obtained. Project construction shall comply with all applicable requirements specified in the Construction General Permit, including but not limited to, preparation of a SWPPP and implementation of construction site Best Management Practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the project. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and shall include BMPs (e.g., Sediment Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in stormwater runoff. Construction Site BMPs shall also conform to the requirements specified in the latest edition of the Orange County Stormwater Program *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* to control and minimize the impacts of construction and construction related activities, materials, and pollutants on the watershed. Upon completion of construction activities and stabilization of the project site, a Notice of Termination shall be submitted via SMARTS.
Regulatory Compliance Measure HYD-2	**Erosion and Sediment Control Plans.** In compliance with the requirements of Sections 8-2.15, 8-2.16, and 8-14.107 of the San Juan Capistrano Municipal Code, the project Applicant shall submit a pollution control plan, construction BMP plan, and/or erosion and sediment control plan to the City of San Juan Capistrano Building Official, or designee, for review and approval prior to issuance of a grading permit. The project Applicant shall also install and maintain erosion control devices year-round in compliance with the City-approved pollution control plan, construction BMP plan, and/or erosion and sediment control plan. The project Applicant shall ensure that the construction BMPs are inspected and maintained prior to, during, and after rain events.

Regulatory Compliance Measure HYD-3

Water Quality Management Plan. Prior to issuance of grading or building permits, the project Applicant shall submit a Final Water Quality Management Plan (WQMP) to the City of San Juan Capistrano City Engineer, or designee, for review and approval in compliance with Sections 8-14.105 and 8-14.106 of the City Municipal Code and the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region (South Orange County MS4 Permit), Order R9-2013-0001, NPDES No. CAS6010266, as amended by Order No. R9-2015-0001, or any other subsequent permit. The Final WQMP shall be prepared consistent with the requirements of the Model Water Quality Management Plan (Model WQMP) for South Orange County (County of Orange 2017) and the Technical Guidance Document for the Preparation of Conceptual/ Preliminary and/or Project Water Quality Management Plans (WQMPs) (County of Orange 2018), or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project site. The City of San Juan Capistrano Building Official and City Engineer, or designees, shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design.

Regulatory Compliance Measure HYD-4

Final Hydrology and Hydraulics Analysis. Prior to issuance of grading or building permits, the project Applicant shall submit Final Hydrology and Hydraulics Analysis to the City of San Juan Capistrano City Engineer, or designee, for review and approval. The Final Hydrology and Hydraulics Analysis shall be prepared consistent with the requirements of the *Orange County Hydrology Manual* and the *Orange County Hydrology Manual Addendum No. 1*, or subsequent guidance manuals. The Final Hydrology and Hydraulics Analysis shall confirm that the on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that

the capacity of downstream storm drain facilities is not exceeded. The City of San Juan Capistrano Building Official and City Engineer, or designees, shall ensure that the drainage facilities specified in the Final Hydrology and Hydraulics Analysis are incorporated into the final project design.

4.9.9.2 Mitigation Measures

The proposed project would be required to implement the following mitigation measures.

Mitigation Measure HYD-1

Equestrian-Related Water Quality Best Management Practices (BMPs). To protect surface water and stormwater quality and to minimize the potential for pollutant discharges associated with equestrian activities, the Applicant shall implement and maintain Horse Care Best Management Practices (BMPs) consistent with guidance from the Orange County Public Works Department. BMPs shall include, but are not limited to, the following:

1. **Grooming and Washing**

    - Horses shall be washed only in areas that drain to the sanitary sewer, a vegetated area, or over gravel surfaces designed to prevent runoff to storm drains or waterbodies.
    - Water use during washing shall be minimized through the use of spray nozzles with automatic shutoff valves, and water shall be turned off when not actively in use.
    - Wash areas shall be elevated or otherwise designed to prevent runoff from contacting surrounding ground surfaces.
    - All horse care products shall be used in accordance with manufacturer instructions, and chemical spills shall be cleaned immediately to prevent entry into the storm drain system.

2. **Manure Collection, Storage, and Disposal**

- Horse manure shall be swept or shoveled daily from holding areas rather than washed down.
- Manure storage areas shall be located away from storm drains and waterbodies, sloped away from drainage pathways, and enclosed or covered to prevent runoff during rainfall.
- Manure and soiled bedding shall be composted or properly disposed of through licensed waste haulers or transported to approved composting or recycling facilities.

3. **Buffer Areas and Facility Design**

- Vegetated buffer strips shall be installed and maintained between corrals, paddocks, manure storage areas, and nearby waterways.
- Any new or reconstructed equestrian facilities shall be designed in accordance with applicable County facility design standards to minimize runoff and pollutant discharges.

These BMPs shall be implemented prior to initiation of equestrian operations and shall be maintained for the life of the project. Consistent with Sections 8-14.109 and 8-14.110 of the City's Municipal Code, these BMPs would be subject to City inspection and enforcement to ensure long-term compliance.

4.9.10 Level of Significance after Mitigation

With implementation of **Mitigation Measure HYD-1**, impacts related to hydrology and water quality would be less than significant.

4.10 NOISE

This section discusses the existing noise environment, summarizes existing noise and vibration regulations, and evaluates potential noise and vibration impacts that would result from the implementation of the proposed Legacy Ranch Project (proposed project). Regulatory compliance measures and/or mitigation measures to reduce or avoid potentially significant noise and vibration impacts are identified, where appropriate. The noise monitoring survey sheets, construction traffic calculations, and traffic noise modeling printouts are provided in **Appendix N** of this Draft Environmental Impact Report (EIR).

4.10.1 Scoping Process

The City of San Juan Capistrano (City) received no comments concerning the proposed project's potential noise impacts during the scoping period for this Draft EIR (November 13 through December 15, 2025). In addition, no comments pertaining to noise were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** of this Draft EIR.

4.10.2 Technical Background

The following provides an overview of the characteristics of sound and vibration, and the regulatory framework that applies to noise and vibration within the vicinity of the project site. Supporting calculations are included in the appendices of this environmental document.

4.10.2.1 Characteristics of Sound

Excess sound has the potential to affect quality of life. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations (or cycles per second) of a wave, resulting in the tone's range from high to low. Loudness is the strength of a sound, describes a noisy or quiet environment, and is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity is the average rate of sound energy transmitted through a unit area perpendicular to the direction in which the sound waves are traveling. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

Measurement of Sound. Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Decibels (dB), unlike the linear scale (e.g., inches or pounds), is a scale based on powers of 10.

For example, 10 dB is 10 times more intense than 0 dB, 20 dB is 100 times more intense than 0 dB, and 30 dB is 1,000 times more intense than 0 dB. Thirty decibels (30 dB) represents 1,000 times as much acoustic energy as 0 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 A weighted decibels (dBA) (very quiet) to 100 dBA (very loud).

Sound levels generate from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source, such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-weighted average noise over a sample period. However, the predominant rating scales for human communities in California are L_{eq} and the Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the relaxation hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance, when assessing the annoyance factor, include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise. Another noise scale often used together with L_{max} in noise ordinances for enforcement purposes is noise standards in terms of percentile noise levels. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level; half the time the noise level exceeds this level and half the time it is less. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first is audible impacts, which refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater since this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory

environments. The last category is changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Physiological Effects of Noise. Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions and thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. Sound levels from 160 to 165 dBA will potentially result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less developed areas. **Table 4.10.A: Definitions of Acoustical Terms** lists definitions of acoustical terms, and **Table 4.10.B: Common Sound Levels and Their Noise Sources** shows common sound levels and their noise sources.

4.10.2.2 Characteristics of Vibration

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. The motion may be discernible outdoors, but without the effects associated with the shaking of a building, there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items on shelves or wall hangings, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings radiating sound waves.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 feet.[1] When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, both construction of the project and freight train operations could result in ground-borne vibration that may be perceptible and annoying.

[1] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September. FTA Report No. 0123. September. < https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf> (accessed February 2026).

Table 4.10.A: Definitions of Acoustical Terms

Term	Definition
Decibel, dB	A unit of noise level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in 1 second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted unless reported otherwise.)
L_2, L_8, L_{50}, L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dB to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter during a designated time interval using fast-time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time; usually a composite of sound from many sources from many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, time of occurrence, and tonal or informational content, as well as the prevailing ambient noise level.

Source: *Handbook of Acoustical Measurements and Noise Control* (Harris 1991).

Table 4.10.B: Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	—
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	—
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	—
Near-Freeway Auto Traffic	70	Moderately Loud	Reference Level
Average Office	60	Quiet	½ as loud
Suburban Street	55	Quiet	—
Light Traffic; Soft Radio Music in Apartment	50	Quiet	¼ as loud
Large Transformer	45	Quiet	—
Average Residence without Stereo Playing	40	Faint	⅛ as loud
Soft Whisper	30	Faint	—
Rustling Leaves	20	Very Faint	—
Human Breathing	10	Very Faint	Threshold of Hearing
—	0	Very Faint	—

Source: Compiled by LSA (2004).

Ground-borne noise is not likely to be a problem because noise arriving via the normal airborne path will usually be greater than ground-borne noise. Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for train-induced ground-borne vibration to cause even cosmetic building damage, it is not uncommon for construction processes (e.g., blasting and pile driving) to cause vibration of sufficient amplitudes to damage nearby buildings.[2] Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS velocity is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration.

4.10.3 Existing Environmental Setting

Surrounding Land Uses. Land uses surrounding the project site include eight single-family residential dwelling units to the north, Camino Capistrano to the east, The Groves Apartments (a senior living apartment community) to the south, and an Orange County Transportation Authority (OCTA)-owned rail line and undeveloped open space to the west. West of Interstate 5 (I-5) and east of Camino Capistrano bounding the project site are a Christmas tree farm and farmer's market, healthcare facilities (Camino Health Center and Kaiser Permanente), JSerra Catholic High School, and two gas stations with convenience stores.

Existing Noise Environment. The primary existing noise sources in the project area are transportation facilities. Traffic on I-5, Camino Capistrano, and other roadways is a steady source of ambient noise in the project vicinity. Existing rail operations west of the project site along with activity at the Swanner House, farmer's market, healthcare facilities, and JSerra Catholic High School also contribute to the existing noise environment.

Ambient Noise Level Measurements. Four long-term noise level measurements were conducted from August 5 to August 11, 2025, and one long-term noise level measurement was conducted from August 5 to August 7, 2025, using Larson Davis Spark 706RC and 705+ dosimeters to document the existing noise environment in the project area. **Table 4.10.C: Long-Term Ambient Noise Monitoring Results** summarizes the results of the long-term noise level measurements along with a description of the measurement locations and noise sources that occurred during the measurements. As shown in **Table 4.10.C**, daytime noise levels across all five monitoring locations ranged from 50.1 to 75.4 dBA L_{eq} and nighttime noise levels ranged from 45.2 to 73.3 dBA L_{eq}. The calculated CNEL level at LT-1, LT-2, LT-3, LT-4, and LT-5 range from 58.0 to 76.4 dBA. The long-term noise level measurement survey sheets along with the hourly L_{eq} results are provided in **Appendix N** of this Draft EIR. **Figure 4.10-1: Noise Monitoring Locations** shows the long-term monitoring locations.

[2] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September. FTA Report No. 0123. September. < https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf> (accessed February 2026).

Table 4.10.C: Long-Term Ambient Noise Monitoring Results

Monitoring No.	Location Description	Noise Levels (dBA)			Noise Sources
		Daytime[1] L_{eq}	Nighttime[2] L_{eq}	CNEL[3]	
LT-1	29943 Camino Capistrano, San Juan Capistrano, CA. At the Swanner House. On an orange tree near the northern corner of the property. Approximately 380 feet from the I-5 centerline.	63.2-69.6	56.1-69.9	70.1-72.4	Traffic on I-5 and Camino Capistrano. Occasional events at the Swanner House.
LT-2	29943 Camino Capistrano, San Juan Capistrano, CA. At the Swanner House. On a tree at the edge of the parking lot. Approximately 300 feet from the I-5 centerline.	69.9-75.4	60.9-73.3	75.2-76.4	Traffic on I-5 and Camino Capistrano. Occasional events at the Swanner House.
LT-3	30300 Camino Capistrano, San Juan Capistrano, CA. At the Camino Health Center. In the parking lot on a light pole. Approximately 270 feet from the I-5 centerline.	69.5-72.6	64.6-72.4	75.8-76.1	Traffic on I-5 and Camino Capistrano.
LT-4	30333 Camino Capistrano, San Juan Capistrano, CA. At the Groves Apartments. On a light pole near the southwest corner of the dog park area. Approximately 1,085 feet from the I-5 centerline and 105 feet from the Camino Capistrano centerline.	50.1-62.1	45.7-61.9	58.0-63.2	Traffic on I-5 and Camino Capistrano.
LT-5	Near the western project site boundary. On an orange tree in an undeveloped part of the project site. Approximately 185 feet from the rail centerline and 1,400 feet from the I-5 centerline.	53.9-63.5	45.2-65.4	62.7-67.9	Faint traffic on I-5.

Source: Compiled by LSA (2026).
[1] Daytime = Hours between 7:00 a.m. and 10:00 p.m.
[2] Nighttime = Hours between 10:00 p.m. and 7:00 a.m.
[3] The CNEL level range over the multi-day noise level measurement.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel(s)
L_{eq} = equivalent continuous sound level



LSA

Project Site

Long Term Noise Monitoring Location

FIGURE 4.10-1

N

0 250 500

FEET

SOURCE: Nearmap (5/7/2025)

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Legacy Ranch Project

Noise Monitoring Locations

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4.10.4 Regulatory Setting

The following describes federal and State guidelines as well as local regulations and policies related to noise and vibration that are relevant to the proposed project.

4.10.4.1 Federal Guidelines

Federal Transit Administration. The construction noise criteria included in the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) was used to evaluate potential construction noise impacts because construction noise levels are exempt from the City's Municipal Code noise standards. **Table 4.10.D: Detailed Assessment Daytime Construction Noise Criteria** shows the FTA's Detailed Assessment Daytime Construction Noise Criteria based on the composite noise levels for each construction phase.

Table 4.10.D: Detailed Assessment Daytime Construction Noise Criteria

Land Use	Daytime 1-hour L_{eq} (dBA)
Residential	80
Commercial	85
Industrial	90

Source: *Transit Noise and Vibration Impact Assessment Manual,* Table 7-3, (FTA 2018).
dBA = A-weighted decibels
FTA = Federal Transit Administration
L_{eq} = equivalent continuous sound level

4.10.4.2 State Guidelines

California Department of Transportation. Vibration standards included in the California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* (Caltrans Manual) are used in this analysis for ground-borne vibration impacts on human annoyance and building damage. The criteria for environmental impact from ground-borne vibration are based on the maximum levels for a single event and the RMS vibration level. **Table 4.10.E: Vibration Annoyance Potential Criteria** provides the criteria for assessing the potential for annoyance from vibration levels. **Table 4.10.F: Construction Vibration Damage Potential Criteria** lists the potential vibration building damage criteria associated with construction activities, as suggested in the Caltrans Manual.

Table 4.10.E: Vibration Annoyance Potential Criteria

Human Response	Vibration Level (RMS in/sec)
Barely perceptible	0.01
Distinctly perceptible	0.04
Strongly perceptible	0.10
Severe	0.40

Source: *Transportation and Construction Vibration Guidance Manual,* Table 7-3, (Caltrans 2020).
Caltrans = California Department of Transportation
in/sec = inch/inches per second
RMS = root-mean-square

Table 4.10.F: Construction Vibration Damage Potential Criteria

Structure / Condition	PPV (in/sec)
Extremely fragile historic buildings, ruins, ancient monuments	0.08
Fragile buildings	0.10
Historic and some old buildings	0.25
Older residential structures	0.30
New residential structures	0.50
Modern industrial / commercial buildings	0.50

Source: *Transportation and Construction Vibration Guidance Manual,* Table 19 (Caltrans 2020).
Caltrans = California Department of Transportation
in/sec = inch/inches per second
PPV = peak particle velocity

4.10.4.3 Local Regulations

City of San Juan Capistrano General Plan. The Noise Element of the City's General Plan[3] contains the following goals and implementing policies related to noise that would be applicable to the proposed project. In addition, noise standards specified in Table N-2 of the City's General Plan Noise Element (shown in **Table 4.10.G: Interior and Exterior Noise Standards** of this document) are used to determine noise impacts.

- **Noise Goal 1:** Minimize the effects of noise through proper land use and planning.
    - **Policy 1.1:** Utilize noise/land use compatibility standards as a guide for future planning and development decisions.
    - **Policy 1.2:** Provide noise control measures and sound attenuating construction in areas of new construction or rehabilitation.
- **Noise Goal 2:** Minimize transportation-related noise impacts.

[3] City of San Juan Capistrano. 1999. *General Plan Noise Element*. December 14. < https://www.sanjuancapistrano.org/DocumentCenter/View/1079/General-Plan---Noise-Element-PDF> (accessed February 2026).

- **Policy 2.1:** Reduce transportation-related noise impacts to sensitive land uses through the use of noise control measures.
- **Policy 2.3:** Incorporate sound-reduction design in development projects impacted by transportation-related noise.

- **Noise Goal 3:** Minimize non-transportation-related noise impacts.
  - **Policy 3.1:** Reduce the impacts of noise producing land uses and activities on noise-sensitive land uses.
  - **Policy 3.2:** Incorporate sound-reduction design in new construction or rehabilitation projects impacted by non-transportation-related noise.

Table 4.10.G: Interior and Exterior Noise Standards

Land Use	Noise Standards (CNEL)	
	Exterior	Interior
Residential (all) – Single-family, multi-family, duplex, mobile home	65 dBA	45 dBA
Residential – Transient lodging, hotels motels, nursing homes, hospitals, assisted care facilities	65 dBA	45 dBA
Private offices, churches, libraries, theaters, concert halls, meeting halls, schools	65 dBA	45 dBA
General commercial, retail, reception, restaurant	65 dBA	50 dBA
Manufacturing, industrial[1]	--	--
Parks, playgrounds	65 dBA[2]	--
Golf courses, outdoor spectator sports	70 dBA[2]	--

Source: *City of San Juan Capistrano General Plan Noise Element*, Table N-2 (City of San Juan Capistrano 1992).

[1] Noise standards not applied to industrial districts.

[2] Outdoor environment limited to playground areas, picnic areas, and other areas of frequent human use.

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibel(s)

City of San Juan Capistrano Municipal Code. Section 9-3.531(b) of the City's Municipal Code,[4] Noise Standards (residential and nonresidential), addresses the creation or permitting the creation of any noise that exceed the standards shown in **Table 4.10.H: Exterior Noise Standards** within a residential, public and institutional, or commercial district.

[4] City of San Juan Capistrano. 2025. *San Juan Capistrano Municipal Code* Section 9-3.531, Noise Standards. April 1.

Table 4.10.H: Exterior Noise Standards

Land Use	Time Period	L_{50} (30 minutes)	L_{25} (15 minutes)	L_8 (5 minutes)	L_2 (1 minute)	L_{max} (Anytime)[5]
Residential, Public, and Institutional Districts	7:00 AM to 7:00 PM	65	70	75	80	85
	7:00 PM to 10:00 PM	55	60	65	70	75
	10:00 PM to 7:00 AM	45	50	55	60	65
Commercial Districts	At any time during the day	65	70	75	80	85

Source: *City of San Juan Capistrano Municipal Code* (City of San Juan Capistrano, October 2019).
Note: No person at any location within San Juan Capistrano, including the industrial and open-space districts, shall create any noise, or permit the creation of any noise, which causes the noise level within a residential, public and institutional, or commercial district to exceed the standards by the amount and for the period of time identified above. Each of the noise levels set forth in this subsection shall be reduced by 5 dBA for impacts of simple tone noises or noises consisting of speech or music.
[1] The noise standard for a cumulative period of more than 30 minutes in any hour.
[2] The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour.
[3] The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour.
[4] The noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour.
[5] The noise standard plus 20 dBA or any period of time.
dBA = A-weighted decibels
L_{max} = maximum instantaneous noise level

Section 9-3.531(d)(4) of the City's Municipal Code exempts construction activities occurring between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, and between the hours of 8:30 a.m. and 4:30 p.m. on Saturday. Construction activities are not exempt outside of these hours or at any time on Sunday or on a national holiday.

In addition, Section 9-3.531(d)(6) of the City's Municipal Code exempts agricultural operations occurring between the hours of 7:00 a.m. and 8:00 p.m., Monday through Saturday. Agricultural operations are not exempt outside of these hours or at any time on Sunday or a federal holiday.

4.10.5 Methodology

Evaluation of noise and vibration impacts associated with the proposed project includes the following:

- Determination of the short-term construction noise and vibration impacts.
- Determination of the long-term off-site traffic noise impacts.
- Determination of the long-term stationary noise impacts from project operations.
- Determination of the required mitigation measures to reduce short-term construction–related noise and vibration impacts and long-term stationary and mobile source noise impacts.

The evaluation of noise and vibration impacts was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the City of San Juan Capistrano General Plan Noise Element and Municipal Code, FTA construction noise criteria, and Caltrans construction vibration criteria.

4.10.6 Thresholds of Significance

The thresholds for noise and vibration impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines*. The proposed project would have a significant noise and vibration impact if it would result in:

Threshold 4.10.1: 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 local general plan or noise ordinance, or applicable standards of other agencies;

Threshold 4.10.2: Generation of excessive ground-borne vibration or ground-borne noise levels; or

Threshold 4.10.3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

4.10.7 Project Impacts

As discussed in Section 3.13 of the Initial Study, the nearest public use airport to the project site is John Wayne Airport, located approximately 15 miles to the northwest. The project site is located outside the airport's 65 dBA CNEL noise contour. Therefore, the proposed project would not expose people residing or working in the project site and surrounding area to excessive noise levels generated from nearby airport operations (Threshold 4.10.3). Therefore, this topic is not discussed further in this Draft EIR.

Threshold 4.10.1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant with Mitigation

Discussion of Effects:

Short-Term Construction Noise Impacts. Two types of short-term noise impacts would occur during construction of the proposed project. The first type would be due to construction crew commutes and the transport of construction equipment and materials to the project limits and would incrementally raise noise levels on roadways leading to the site. The pieces of construction equipment for construction activities would move on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the project vicinity. The results of the California Emissions Estimator Model (CalEEMod) (version 2022.1) contained in **Appendix C** of this Draft EIR indicate that the building construction phase would generate the most trips out of all of the construction phases and have an acoustical equivalent traffic volume of 325 passenger car equivalent vehicles on Camino Capistrano. Near the project site, the existing average daily traffic (ADT) volume on Camino Capistrano is 4,195 based on ADT volumes derived from the *Northwest*

Open Space Legacy Ranch Traffic Impact Analysis.[5] Based on the information above and the calculations provided in **Appendix N** of this Draft EIR, construction-related traffic would increase noise levels by up to 0.3 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term construction-related noise impacts associated with worker commute and equipment transport to the project site would be **less than significant**. No mitigation measures are required.

The second type of short-term noise impact is related to noise generated from construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. The proposed project anticipates demolition, site preparation, grading, building construction, paving, and architectural coating. These various sequential phases change the character of the noise generated on a project site. Therefore, the noise levels vary as construction progresses. Despite the variety in type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. **Table 4.10.I: Typical Construction Equipment Noise Levels** lists the L_{max} recommended for noise impact assessments for typical construction equipment included in the Federal Highway Administration's *FHWA Highway Construction Noise Handbook* (2006), based on a distance of 50 feet between the equipment and a noise receptor.

Table 4.10.J: Summary of Construction Phase, Equipment, and Noise Levels lists the anticipated construction equipment for each construction phase based on the CalEEMod (Version 2022.1) results contained in **Appendix C** of this Draft EIR. **Table 4.10.J** shows the combined noise level at 50 feet from all of the equipment in each phase and the L_{eq} noise level for each equipment at 50 feet based on the quantity, reference L_{max} noise level at 50 feet, and the acoustical usage factor. As shown in **Table 4.10.J**, construction noise levels would reach up to 89.2 dBA L_{eq} at a distance of 50 feet.

Table 4.10.K: Construction Noise Levels shows that construction noise levels at the closest noise sensitive receptors to the project site would reach up to 89.2 dBA L_{eq} as measured from the project site boundary. In addition, **Table 4.10.L: Construction Noise Level Increase** shows that project construction activities would increase the ambient noise levels at the nearest noise sensitive receptor to the south of the project site up to 34.8 dBA. While Section 9-3.3.531 of the City's Municipal Code establishes noise standards for both residential and nonresidential land uses in the City, Section 9-3.531(d)(4) exempts noise associated with construction activities between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, or between the hours of 8:30 a.m. and 4:30 p.m. on Saturday. Proposed project construction would be limited to these days and times, consistent with the City's noise standards (see **Regulatory Compliance Measure NOI-1**). Therefore, noise generated from project construction activities would be **less than significant**. No mitigation measures are required.

[5] LSA Associates, Inc. 2026. *Northwest Open Space Legacy Ranch Traffic Impact Analysis*. February.

Table 4.10.I: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Use Factor[1] (%)	Maximum Noise Level (L_{max}) at 50 ft[2]
Backhoe	40	80
Compactor (ground)	20	80
Compressor	40	80
Concrete Saw	20	90
Crane	16	85
Dozer	40	85
Drill Rig Truck	20	84
Dump Truck	40	84
Excavator	40	85
Flatbed Truck	40	84
Man Lift (Forklift)	20	85
Front-End Loader	40	80
Generator	50	82
Generator (<25KVA, VMS signs)	50	70
Grader	40	85
Jackhammer	20	85
Pavement Scarifier	20	85
Paver	50	85
Pickup Truck	40	55
Pneumatic Tools	50	85
Pump	50	77
Rock Drill	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Welder/Torch	40	73

Source: *FHWA Highway Construction Noise Handbook,* Table 9.1 (FHWA 2006).
Note: The noise levels reported in this table are rounded to the nearest whole number.
[1] Acoustical use factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.
[2] Maximum noise levels were developed based on Specification 721.560 from the CA/T program to be consistent with the City of Boston, Massachusetts, Noise Code for the "Big Dig" project.
CA/T = Central Artery/Tunnel
FHWA = Federal Highway Administration
ft = foot/feet
L_{max} = maximum instantaneous noise level

Table 4.10.J: Summary of Construction Phase, Equipment, and Noise Levels

Construction Phase	Construction Equipment	Quantity	Reference Noise Level at 50 ft (dBA L_{max})	Acoustical Use Factor[1] (%)	Noise Level at 50 ft (dBA L_{eq})	Combined Noise Level at 50 ft (dBA L_{eq})
Demolition	Concrete Saw	1	90	20	83.0	89.2
	Excavator	3	85	40	85.8	
	Dozer	2	85	40	84.0	
Site Preparation	Dozer	3	85	40	85.8	87.3
	Front-End Loader	4	80	40	82.0	
Grading	Excavator	2	85	40	84.0	89.2
	Grader	1	85	40	81.0	
	Dozer	1	85	40	81.0	
	Scraper	2	85	40	84.0	
	Front-End Loader	2	80	40	79.0	
Building Construction	Crane	1	85	16	77.0	86.8
	Man Lift	3	85	20	82.8	
	Generator	1	82	50	79.0	
	Front-End Loader	3	80	40	80.8	
	Backhoe	1	80	40	76.0	
Paving	Paver	2	85	50	85.0	87.6
	Pavement Scarafier	2	85	20	81.0	
	Roller	2	85	20	81.0	
Architectural Coating	Compressor (air)	1	80	40	76.0	76.0

Source: Compiled by LSA (2026).
[1] The acoustical use factor is the percentage of time during a construction noise operation that a piece of construction equipment operates at full power.
[2] It is assumed that noise generated from crushing/processing equipment would be similar to a rock drill.
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level

Table 4.10.K: Construction Noise Levels

Land Use	Direction	Reference Noise Level at 50 ft (dBA L_{eq})	Distance (ft)	Distance Attenuation (dBA)	Noise Level (dBA L_{eq})
Residence	North	89.2	50	0.0	89.2
Farm	East	89.2	50	0.0	89.2
Office	Southeast	89.2	60	1.6	87.6
School	Southeast	89.2	70	2.9	86.3
Residence	South	89.2	50	0.0	89.2
Swanner	On-Site	89.2	50	0.0	89.2

Source: Compiled by LSA (2026).
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level

Table 4.10.L: Construction Noise Level Increase

Land Use	Direction	Reference Noise Level at 50 ft (dBA L_{eq})	Noise Level (dBA L_{eq})	Monitoring No.	Ambient Noise Level (dBA L_{eq})	Total Noise Level (dBA L_{eq})	Noise Increase (dBA)
Residence	North	89.2	89.2	LT-1	66.8	89.2	22.4
Farm	East	89.2	89.2	LT-2	71.9	89.3	17.4
Office	Southeast	89.2	87.6	LT-3	71.5	87.7	16.2
School	Southeast	89.2	86.3	LT-3	71.5	86.4	14.9
Residence	South	89.2	89.2	LT-4	54.4	89.2	34.8
Swanner	On-Site	89.2	89.2	LT-2	71.9	89.3	17.4

Source: Compiled by LSA (2026).
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level

Regulatory Compliance Measure NOI-1

The project construction contractor shall limit construction activities to between the hours of 7:00 a.m. and 6:00 p.m., Mondays through Fridays, and between the hours of 8:30 a.m. and 4:30 p.m. on Saturdays, pursuant to Section 9-3.531 of the City of San Juan Capistrano's Municipal Code. Construction noise is prohibited outside of these hours, on Sundays, and on national holidays (Section 9-3.531(d)).

Long-Term Traffic Noise Impacts. The FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions along roadways in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry, to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resulting noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The Existing and Cumulative (2032) without and with project ADT volumes were obtained from the *Northwest Open Space Legacy Ranch Traffic Impact Analysis*.[6] The standard vehicle mix for Southern California roadways was used for traffic on these roadway segments. **Table 4.10.M: Existing Traffic Noise Levels Without and With Project** and **Table 4.10.N: Cumulative Traffic Noise Levels Without and With Project** list the traffic noise levels for the Existing and Cumulative without and with project scenarios, respectively. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. The specific assumptions used in developing these noise levels and the model printouts are provided in **Appendix N** of this Draft EIR.

6 LSA Associates, Inc. 2026. *Northwest Open Space Legacy Ranch Traffic Impact Analysis*. February.

Table 4.10.M: Existing Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions (dBA)
Camino Capistrano North of Junipero Serra Road	5,679	< 50	57	112	62.9	6,341	< 50	60	121	63.3	0.4
Junipero Serra Road Between Camino Capistrano and Lion Way	13,754	< 50	80	165	65.4	14,196	< 50	81	168	65.6	0.2
Junipero Serra Road Between Lion Way and I-5 Southbound Ramps	13,754	< 50	80	165	65.4	14,196	< 50	81	168	65.6	0.2
Junipero Serra Road Between I-5 Southbound and I-5 Northbound Ramps	16,220	< 50	88	183	66.1	16,496	< 50	89	185	66.2	0.1
Junipero Serra Road Between I-5 Northbound Ramps and Rancho Viejo Road	15,403	< 50	85	177	65.9	15,513	< 50	86	178	66.0	0.1

Source: Compiled by LSA (2026).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
ft = foot/feet
I-5 = Interstate 5

Table 4.10.N: Cumulative (2032) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions (dBA)
Camino Capistrano North of Junipero Serra Road	6,141	< 50	59	118	63.2	6,803	< 50	63	126	63.6	0.4
Junipero Serra Road Between Camino Capistrano and Lion Way	15,353	< 50	85	177	65.9	15,795	< 50	86	180	66.0	0.1
Junipero Serra Road Between Lion Way and I-5 Southbound Ramps	17,983	< 50	94	196	66.6	18,425	< 50	95	199	66.7	0.1
Junipero Serra Road Between I-5 Southbound and I-5 Northbound Ramps	19,190	< 50	98	205	66.9	19,466	< 50	98	206	66.9	0.0
Junipero Serra Road Between I-5 Northbound Ramps and Rancho Viejo Road	16,948	< 50	90	189	66.3	17,058	< 50	91	189	66.4	0.1

Source: Compiled by LSA (2026).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
ft = foot/feet
I-5 = Interstate 5

Tables 4.10.M and **4.10.N** show that the project-related traffic would increase noise by up to 0.4 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, traffic noise from project-related traffic on off-site sensitive receptors would be **less than significant**. No noise mitigation measures are required.

Long-Term Stationary Noise Impacts. The proposed project would include new stationary noise sources generated from the proposed project, which would include sources such as noise generated from playground activities, crowd noise from the Equestrian Core, heating, ventilation, and air conditioning (HVAC) equipment, agricultural activities, and outdoor events with amplified sound. The following provides a detailed noise analysis and discussion of each stationary noise source.

Trails and Natural Core Activities. The Trails and Natural Core would be located between Trabuco Creek and the Equestrian Core. Noise-generating activities from the Trails and Natural Core would include the playground and educational programming area. These sources of noise are expected to be low level and would not result in perceptible increases in ambient noise levels exceeding the City's daytime exterior noise standard. The City's exterior evening and nighttime noise standards would not be exceeded because no Trails and Natural Core activities would occur during those hours. Therefore, noise generated from Trails and Natural Core activities would be **less than significant**.

Parking Activities. The proposed project would include new surface parking lots for automobiles at various locations on the project site including the event barn in the Event Barn Core, community building in the Community Building Core, a lot near the Chapel Core and Equestrian Core, and scattered parking along the perimeter of Putuidem Village. Noise generated from parking lot activities would include noise generated by vehicles traveling at slow speeds, engine start-up noise, car door slams, car horns, car alarms, and tire squeals. Car door slams would have a sound power level of 98.1 based on the SoundPLAN model. This noise level would be equivalent to 66.5 dBA L_{eq} at a distance of 50 ft and would be the representative noise level for a busy parking lot when parking noise occur continuously for 60 minutes. The closest residential and commercial property line to the parking lot would be located approximately 595 ft and would be exposed to a noise level of 45 dBA L_{eq} from a distance attenuation of 21.5 dBA. This noise level would not exceed the City's exterior daytime, evening, and nighttime noise standards of 65, 55, and 45 dBA, respectively, for residential properties. Also, the noise level would not exceed the City's exterior noise standard of 65 dBA for commercial properties. Therefore, noise generated from automobile parking activities would be less than significant.

The proposed project would also include parking for trucks carrying horses and animals to and from the equestrian area within the Equestrian Core. Trucks carrying horses and animals would range from 0.5-ton (Ford F-150) to 1-ton (Ford 350) trucks. Noise generated from truck parking activities would be similar to automobiles described above and a representative noise level for a busy truck parking lot would be 66.5 dBA L_{eq} at a distance of 50 ft. The closest residential and commercial property line to the truck parking lot would be located approximately 1,290 ft and would be exposed to a noise level of 38.3 dBA L_{eq} from a distance attenuation of 28.2 dBA. This noise level would not exceed the City's exterior daytime, evening, and nighttime noise standards of 65, 55, and 45 dBA, respectively, for

residential properties. Also, this noise level would not exceed the City's exterior noise standard of 65 dBA for commercial properties. Therefore, noise generated from truck parking activities would be less than significant.

Equestrian Core Spectator Activity. The proposed Equestrian Core would be located in the center of the project site and would have equestrian events on a regular basis, including dressage, horse shows, horse jumping, and rodeo. Equestrian events would have temporary or permanent stands accommodating a maximum capacity of 1,200 spectators on a regular basis and occasionally up to a maximum capacity of 2,500 spectators. One spectator talking would generate a noise level of 65 dBA at a distance of three feet. The combined noise level of 2,500 people talking would be 99.0 dBA L_{eq} at three feet. **Table 4.10.O: Spectator Activity** shows the distances from the center of the temporary or permanent stands where spectators would be located to the property lines of adjacent land uses surrounding the project site. As shown in **Table 4.10.O**, noise generated from spectator activity would not exceed the City's daytime and evening noise standards of 65 dBA and 55 dBA, respectively, for residential and school properties. No noise impacts would occur at the school during evening hours because the school is closed during evening hours. Also, no noise impacts would occur at residential properties during nighttime hours because there would be no equestrian events during nighttime hours. In addition, noise generated from spectator activities would not exceed the City's noise standard of 65 dBA at commercial properties, including office properties. Therefore, noise generated from spectator activities at the Equestrian Core would be **less than significant**.

Table 4.10.O: Spectator Activity

Land Use	Direction	Reference Noise Level (dBA L_{eq}) at 3 ft	Distance[1] (ft)	Distance Attenuation (dBA)	Noise Level (dBA L_{eq})	Noise Standard[2]	Exceed?
Residence	North	99.0	1,235	52.3	46.7	65/55	No/No
Office	Southeast	99.0	1,035	50.8	48.2	65	No
School	Southeast	99.0	1,115	51.4	47.6	65	No
Residence	South	99.0	1,020	48.4	48.4	65/55	No/No

Source: Compiled by LSA (2026).
[1] Distance from the spectator activity to the property lines of the adjacent off-site land uses.
[2] Exterior daytime and evening noise standard.
dBA = A-weighted decibel(s)
L_{eq} = equivalent continuous sound level
ft = feet/foot

Agricultural Core Activities. The proposed project would include agricultural activities at the northern end in the Agricultural Core. Noise generated from agricultural activities would be similar to construction equipment and could include a tractor, loader, and forklift. Agricultural operations shall be limited to between the hours of 7:00 a.m. and 8:00 p.m., Monday through Saturday, pursuant to Section 9-3.531(d)(6) of the City Municipal Code. The implementation of agricultural operational hour limits, as summarized in **Regulatory Compliance Measure NOI-2** and provided below, would minimize disturbance to nearby land uses. Therefore, noise generated from agricultural operations would be **less than significant**. No mitigation measures are required.

Regulatory Compliance Measure NOI-2	Agricultural activities shall be limited to between the hours of 7:00 a.m. and 8:00 p.m., Monday through Saturday, pursuant to Section 9-3.531(d)(6) of the City's Municipal Code. Agricultural activities are prohibited outside of these hours or any time on Sundays or on federal holidays.

HVAC Equipment. The proposed project would include HVAC units for the proposed buildings on the project site, including the 5,000 square foot (sf) catering facility in the Agriculture Core, 8,100 sf event barn in the Event Barn Core, 10,000 sf building in the Community Building Core, the 5,880 sf farm stay center and amenities building and the 70 overnight farm stay units in the Farm Stay Core, and the 4,500 sf chapel in the Chapel Core. The HVAC equipment could operate 24 hours per day. Prior to the issuance of building permits and when the HVAC location, number of units, and specifications for each building are available, an acoustical study shall be prepared by a qualified acoustical consultant and submitted to the City for review and approval to confirm compliance with the City exterior noise standards shown in **Table 4.10.H**. If it is discovered that noise levels exceed the City exterior noise standards, additional measures would be recommended by a qualified acoustical consultant that may include but not be limited to the location of the equipment on the project, additional shielding (screening or soundwalls), or using equipment that has a quieter rating. With the implementation of **Mitigation Measure NOI-1** provided below, noise generated by the HVAC equipment on the project site would be **less than significant with mitigation incorporated**.

Mitigation Measure NOI-1	**Heating, Ventilation, and Air Conditioning (HVAC) Equipment Operations.** Prior to the issuance of building permits and when the HVAC locations, number of units, and specifications for each building are available, an acoustical study shall be prepared by a qualified acoustical consultant and submitted to the City for review and approval to confirm compliance with the City's exterior noise standards shown in **Table 4.10.H**. If it is discovered that noise levels exceed the City's exterior noise standards, additional measures shall be recommended by a qualified acoustical consultant that may include but not be limited to location of the equipment on the project, additional shielding (screening or soundwalls), or using equipment that has a quieter rating.

Outdoor Events with Amplified Sound. The proposed project would include outdoor events with amplified sound at various locations throughout the project site, which would include the Event Barn Core, Equestrian Core, and Chapel Core. Noise generated from outdoor events would consist of amplified sound from a variety of speakers along with people talking and raised voices. Speakers would be used for background music, live music, and/or

entertainment. The potential noise impacts from operation of the speakers would be heavily dependent on the volume setting and directionality of each speaker. While one individual outdoor area may comply with the City's noise standards, it is important to note that when multiple activities or events occur simultaneously, the compounded noise level would have the potential to increase noise and result in a potentially significant impact.

Due to the variety and size of outdoor events with amplified sound that could occur simultaneously at various locations on the project site, once the project is in operation, an acoustical study consisting of noise monitoring during three (3) peak activity weekends shall be prepared by a qualified acoustical consultant. The acoustical study would be submitted to the City for review and approval to confirm compliance with the City exterior noise standards shown in **Table 4.10.H**. If it is discovered that noise levels exceed the City's exterior noise standards, additional measures would be recommended by a qualified acoustical consultant that may include, but not be limited to, the use of highly directional speakers, speaker noise level restrictions, event restrictions, or additional noise barriers. With the implementation of **Mitigation Measure NOI-2,** provided below, noise generated by outdoor events with amplified sound would be **less than significant with mitigation incorporated**.

Mitigation Measure NOI-2 **Operations Compliance Inspection and Monitoring.** A qualified acoustical consultant shall prepare an acoustical study consisting of noise monitoring during three (3) peak activity weekends once the project is in operation to confirm compliance with the City's exterior noise standards shown in **Table 4.10.H**. If the proposed project construction is phased, additional acoustical studies may be required as each phase is completed to confirm compliance with the City's exterior noise standards. Also, if it is discovered that noise levels exceed the City's exterior noise standards, additional measures shall be recommended by a qualified acoustical consultant that may include, but not be limited to, the use of highly directional speakers, speaker noise level restrictions, event restrictions, or additional noise barriers.

Threshold 4.10.2: Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Less than Significant Impact

Discussion of Effects:

Short-Term Construction Impacts. This construction vibration impact analysis assesses human annoyance and the potential for building damage using vibration levels in PPV (in/sec). **Table 4.10.P: Vibration Source Amplitudes for Construction Equipment** shows the reference vibration levels at a distance of 25 feet for each type of standard construction equipment from the *Transit Noise and*

Vibration Impact Assessment Manual.[7] Project construction is expected to require the use of large bulldozers and loaded trucks which would generate ground-borne vibration levels of up to 0.089 in/sec PPV-max (0.062 in/sec PPV-RMS) and 0.076 in/sec PPV-max (0.053 in/sec PPV-RMS), respectively, when measured at 25 feet.

Table 4.10.P: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	Maximum PPV (in/sec)	RMS PPV (in/sec)[1]
Pile Driver (Impact), Typical	0.644	0.451
Pile Driver (Sonic), Typical	0.170	0.119
Vibratory Roller	0.210	0.147
Hoe Ram	0.089	0.062
Large Bulldozer[2]	**0.089**	**0.062**
Caisson Drilling	0.089	0.062
Loaded Trucks[2]	**0.076**	**0.053**
Jackhammer	0.035	0.025
Small Bulldozer	0.003	0.002

Sources: *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).
[1] RMS vibration velocity is 70 percent of the maximum PPV.
[2] Equipment shown in bold is expected to be used on site.
µin/sec = microinches per second
Caltrans = California Department of Transportation
ft = foot/feet
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

The greatest vibration levels are anticipated to occur during the demolition, site preparation, and grading phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project site boundary (assuming the construction equipment would be used at or near the project site boundary) because vibration impacts normally occur within buildings.

The formula for vibration transmission is provided below:

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$$

Table 4.10.Q: Potential Construction Vibration Annoyance lists the projected vibration levels from various construction equipment expected to be used from the center of the project site to the nearest buildings in the project vicinity. As shown in **Table 4.10.Q**, the closest building from the center of the construction area is approximately 1,020 feet and would experience a vibration level of up to 0.001 in/sec PPV-RMS. This vibration level would not have the potential to result in community annoyance because vibration levels would not exceed the Caltrans annoyance threshold of 0.04

[7] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September. FTA Report No. 0123. September. < https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf> (accessed February 2026).

in/sec PPV-RMS. Other building structures that surround the project site would experience lower vibration levels because they are farther away.

Table 4.10.Q: Potential Construction Vibration Annoyance

Land Use	Direction	Equipment/ Activity	Reference Vibration Level at 25 ft (in/sec [PPV-RMS])	Distance to Structure (ft)[1]	Vibration Level (in/sec [PPV-RMS])
Residence	North	Large bulldozers	0.062	1,610	<0.001
		Loaded trucks	0.053	1,610	<0.001
Swanner House[2]	North	Large bulldozers	0.062	1,260	<0.001
		Loaded trucks	0.053	1,260	<0.001
Farm	East	Large bulldozers	0.062	1,375	<0.001
		Loaded trucks	0.053	1,375	<0.001
Office	Southeast	Large bulldozers	0.062	1,020	0.001
		Loaded trucks	0.053	1,020	<0.001
School	Southeast	Large bulldozers	0.062	1,245	<0.001
		Loaded trucks	0.053	1,245	<0.001
Residence	South	Large bulldozers	0.062	1,360	<0.001
		Loaded trucks	0.053	1,360	<0.001

Source: Compiled by LSA (2026).
Note: The Caltrans annoyance threshold is 0.04 in/sec PPV-RMS.
[1] Distance from the center of the project site to the building structure.
[2] The Swanner House is a building within the project site that will remain.
Caltrans = California Department of Transportation
ft = foot/feet
in/sec = inches per second
PPV = peak particle velocity
RMS = root-mean-square

Similarly, **Table 4.10.R: Potential Construction Vibration Damage** lists the projected vibration levels from various construction equipment expected to be used at the project construction boundary to the nearest buildings in the project vicinity. As shown in **Table 4.10.R**, the closest building from the project construction boundary is an older residential structure, which is approximately 40 feet to the north. This structure would experience a vibration level of up to 0.053 PPV-Max (in/sec). The Caltrans vibration damage threshold that applies to older structures is 0.30 PPV (in/sec). Accordingly, this vibration level would not have the potential to result in building damage. Other structures that surround the project site, which for purposes of this analysis are conservatively assumed to be older residential structures, would experience lower vibration levels because they are farther away. Therefore, construction vibration impacts would be **less than significant**. No mitigation measures are required.

Long-Term Operational Vibration Impacts. The proposed project would not generate vibration. In addition, vibration levels generated from project-related traffic on the adjacent roadways (Camino Capistrano and other roadways in the project vicinity) are unusual for on-road vehicles because the rubber tires and suspension systems of on-road vehicles provide vibration isolation. Therefore, vibration impacts from project-related operations would be **less than significant**. No mitigation measures are required.

Table 4.10.R: Potential Construction Vibration Damage

Land Use	Direction	Equipment/ Activity	Reference Vibration Level at 25 ft (in/sec [PPV-Max])	Distance to Structure (ft)[1]	Vibration Level (in/sec [PPV-Max])
Residence	North	Large bulldozers	0.089	40	0.053
		Loaded trucks	0.076	40	0.045
Swanner House[2]	North	Large bulldozers	0.089	60	0.034
		Loaded trucks	0.076	60	0.029
Farm	East	Large bulldozers	0.089	90	0.022
		Loaded trucks	0.076	90	0.019
Office	Southeast	Large bulldozers	0.089	80	0.025
		Loaded trucks	0.076	80	0.021
School	Southeast	Large bulldozers	0.089	140	0.013
		Loaded trucks	0.076	140	0.011
Residence	South	Large bulldozers	0.089	50	0.042
		Loaded trucks	0.076	50	0.035

Source: Compiled by LSA (2026).
Note: The Caltrans building damage threshold for older residential structures is 0.30 PPV (in/sec).
[1] Distance from the project construction boundary to the building structure.
[2] The Swanner House is a building within the project site that will remain.
Caltrans = California Department of Transportation
ft = foot/feet
in/sec = inches per second
PPV = peak particle velocity

4.10.8 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for noise and vibration. The cumulative impact area for noise is the project site and adjacent areas.

A cumulative noise impact would occur if multiple sources of noise from cumulative projects, including the cumulative projects provided in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures, were to combine to create impacts in close proximity to a sensitive receptor. Because construction noise and vibration levels are localized and rapidly attenuate within an urban environment, the majority of the identified cumulative projects are located too far from the project site to contribute to cumulative impacts related to noise levels due to construction activities. Construction activities at these related project sites would not result in a noticeable increase in noise to sensitive receptors adjacent to the project site. Furthermore, all related projects would be required to comply with the City's Noise Ordinances. Therefore, cumulative construction noise impacts would be considered less than significant.

Although the majority of the identified cumulative projects are located too far from the project site to contribute to cumulative impacts related to noise levels due to construction activities, the CalTrout Trabuco Creek Fish Ladder Project would be located within Trabuco Creek, partially within and adjacent to the project site. The CalTrout Trabuco Creek Fish Ladder Project includes the construction of engineered hydraulic fishway structures and channel improvements within Trabuco Creek in order to restore aquatic connectivity and remediate fish-passage barriers. Construction of

the CalTrout Trabuco Creek Fish Ladder Project would likely include vegetation removal on the banks of Trabuco Creek and grading/site preparation activities, in addition to the use of construction equipment, which would generate noise. However, similar to the proposed project and other past, present, and future projects in the city, construction of the CalTrout Trabuco Creek Fish Ladder Project would be required to adhere to the construction hour limits in Section 9-3.531(d)(4) of the City Municipal Code. Further, the CalTrout Trabuco Creek Fish Ladder Project would undergo environmental review that would identify potential impacts and prescribe mitigation, as necessary, to address potential significant impacts. As such, implementation of the proposed project in combination with the CalTrout Trabuco Creek Fish Ladder Project would not result in significant cumulative impacts related to construction noise.

Cumulative operational noise impacts could occur as a result of increased traffic volumes on local roadways due to future growth from cumulative projects in the project area. Cumulative traffic noise impacts are based on the difference between existing traffic volumes and future traffic volumes after buildout of the proposed project and in combination with related projects currently being proposed or built in the vicinity of the project site. As shown in **Tables 4.10.M** and **4.10.N**, the cumulative traffic noise increase associated with the proposed project would reach up to 0.3 dBA along roadway segments in the project vicinity for the existing and cumulative scenarios. A noise level increase less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, the proposed project would not contribute substantially to cumulative roadway noise impacts and would have a less than cumulatively considerable impact.

Overall, the cumulative noise impacts of the proposed project and the cumulative projects would be **less than cumulatively considerable**.

4.10.9 Level of Significance Prior to Mitigation

Impacts related to noise and vibration would be potentially significant without implementation of mitigation.

4.10.10 Regulatory Compliance Measures and Mitigation Measures

4.10.10.1 Regulatory Compliance Measures

The implementation of the following regulatory compliance measures would minimize noise.

Regulatory Compliance Measure NOI-1

The project construction contractor shall limit construction activities to between the hours of 7:00 a.m. and 6:00 p.m., Mondays through Fridays, and between the hours of 8:30 a.m. and 4:30 p.m. on Saturdays, pursuant to Section 9-3.531 of the City of San Juan Capistrano's Municipal Code. Construction noise is prohibited outside of these hours, on Sundays, and on national holidays (Section 9-3.531(d)).

Regulatory Compliance Measure NOI-2	Agricultural activities shall be limited to between the hours of 7:00 a.m. and 8:00 p.m., Monday through Saturday, pursuant to Section 9-3.531(d)(6) of the City's Municipal Code. Agricultural activities are prohibited outside of these hours or any time on Sundays or on federal holidays.

4.10.10.2 Mitigation Measures

The implementation of the following mitigation measures would reduce noise levels.

Mitigation Measure NOI-1	**Heating, Ventilation, and Air Conditioning (HVAC) Equipment Operations.** Prior to the issuance of building permits and when the HVAC locations, number of units, and specifications for each building are available, an acoustical study shall be prepared by a qualified acoustical consultant and submitted to the City for review and approval to confirm compliance with the City's exterior noise standards shown in **Table 4.10.H**. If it is discovered that noise levels exceed the City's exterior noise standards, additional measures shall be recommended by a qualified acoustical consultant that may include, but not be limited to location of the equipment on the project, additional shielding (screening or soundwalls), or using equipment that has a quieter rating.
Mitigation Measure NOI-2	**Operations Compliance Inspection and Monitoring.** A qualified acoustical consultant shall prepare an acoustical study consisting of noise monitoring during three (3) peak activity weekends once the project is in operation to confirm compliance with the City's exterior noise standards shown in **Table 4.10.H**. If the project is phased, additional acoustical studies may be required. Also, if it is discovered that noise levels exceed the City's exterior noise standards, additional measures shall be recommended by a qualified acoustical consultant that may include, but not be limited to, the use of highly directional speakers, speaker noise level restrictions, event restrictions, or additional noise barriers.

4.10.11 Level of Significance after Mitigation

With implementation of **Mitigation Measures NOI-1** and **NOI-2**, impacts related to noise and vibration would be reduced to less than significant.

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4.11 TRANSPORTATION

This section describes the existing and future transportation and circulation conditions on the project site and its vicinity, describes the analysis methodology and regulatory framework, and identifies potential transportation-related impacts that would result from the implementation of the proposed Legacy Ranch Project (proposed project). Topics evaluated in the analysis include an assessment of vehicle miles traveled (VMT), site access and circulation, hazards, and emergency vehicle access.

The information in this section is based, in part, on the Traffic Impact Analysis (TIA) prepared by LSA in June 2026.[1] This report is provided in **Appendix N** to this Draft Environmental Impact Report (EIR). The analyses were conducted in accordance with the current standards and methodologies required by law and set forth by the City of San Juan Capistrano (City).

4.11.1 Scoping Process

The City received three comments during the scoping period for this Draft EIR (November 13 through December 15, 2025) concerning the proposed project's potential transportation impacts, as discussed below. In addition, one comment pertaining to transportation was submitted during the public scoping meeting held on November 19, 2025, as discussed below.

- Colton Almquist, November 19, 2025, requested the EIR discuss project impacts related to transportation.

- California Department of Transportation (Caltrans), District 2, December 11, 2025, identified potential traffic impacts with implementation of the proposed project, encouraged the incorporation of Complete Streets and additional bicycle infrastructure into the proposed project, and encouraged coordination with the Orange County Transportation Authority (OCTA) for opportunities to enhance multimodal transit strategies. Caltrans also requested that the Draft EIR include a discussion relating to City's Circulation Element in promoting an advanced public transportation network (Circulation Goal 2) and stated that any work performed within Caltrans right-of-way will require discretionary review and approval by Caltrans and an encroachment permit. Lastly, Caltrans noted that project plans and traffic control plans must be stamped and signed by a licensed engineer.

- Jimv0721@icloud.com, December 13, 2025, raised concerns over potential traffic impacts with implementation of the proposed project.

- Orange County Transportation Authority (OCTA), December 15, 2025, requests the installation of an appropriate barrier or fencing adjacent to the railroad tracks and that any lighting installed near the tracks be directed away from the tracks. OCTA also requests that drainage be designed and directed away from the tracks and that all improvements and construction activities within or adjacent to the rail corridor must comply with Southern California Regional Rail Authority

[1] LSA. 2026. *Traffic Impact Analysis, Northwest Open Space Legacy Ranch Project, San Juan Capistrano, California*. June.

standards, and that the proposed Applicant must coordinate with the OCTA ROW Department for access permits during construction.

Scoping comments are provided in **Appendix A** to this Draft EIR.

4.11.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, Orange County. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, a senior living residential community (The Groves Apartments) to the south, and an Orange County Transportation Authority (OCTA)-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route.

The irregularly shaped project site is largely undeveloped with the exception of the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site and there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site.

4.11.2.1 Existing Circulation System

The following describes the existing circulation system in the vicinity of the project site, including the existing roadway, pedestrian, bicycle, and transit network.

Roadway Facilities. Regional access to the project site is provided by Interstate 5 (I-5) east of the project site, with direct access provided via Camino Capistrano. Key roadways in the vicinity of the project site, including I-5 and Camino Capistrano, are discussed below.

- **I-5:** I-5 is a north-south interstate freeway located east of the project site. I-5 has 12 to 14 travel lanes in the vicinity of the project site, of which five to six are general-purpose lanes and one is a high-occupancy vehicle lane in each direction.

- **Camino Capistrano:** Camino Capistrano is a north-south roadway directly east of the project site and it is designated as a Secondary Arterial in the City's General Plan Circulation Element. Camino Capistrano has two travel lanes and the segment from Junipero Serra Road to approximately 0.3 mile north has a two-way-left-turn lane (TWLTL) center median. The speed limit along Camino Capistrano is 45 miles per hour (mph). On-street parking is prohibited on both sides of Camino Capistrano.

- **Rancho Viejo Road:** Rancho Viejo Road is a north-south roadway east of the project site and it is designated as a Secondary Arterial in the City's General Plan Circulation Element. Rancho Viejo Road has four travel lanes divided by a median or left-turn lane. The speed limit along Rancho Viejo Road is 45 mph. On-street parking is prohibited on both sides of this roadway.

- **Junipero Serra Road:** Junipero Serra Road is an east-west roadway south of the project site and it is designated as a Primary Arterial in the City's General Plan Circulation Element. Junipero

Serra Road has four travel lanes. The speed limit along Junipero Serra Road is 40 mph. Sidewalks are provided on both sides of the street. On-street parking is prohibited on both sides of this roadway.

Pedestrian Circulation. In the vicinity of the project site, sidewalks are provided on the east side of Camino Capistrano for 0.3 mile north of Junipero Serra Road. No other sidewalks exist in the vicinity of the project site. City-maintained trails also traverse the project site. These trails provide connections to the east side of the City via a trail under I-5 and to west of the railroad tracks via a trail under the OCTA rail bridge. These trails also serve as equestrian trails.

Bicycle Circulation. In the vicinity of the project site, on-street (Class II) bicycle lanes are provided on both sides of Camino Capistrano; however, the northbound (east side) lane is discontinuous for approximately 0.3 mile north of Junipero Serra Road. In addition, an off-street bike path (Class I) is provided on the east side of Rancho Viejo Road and an on-street (Class II) bicycle lane is provided on the north side of the segment of Junipero Serra Road between Camino Capistrano and the I-5 southbound off-ramp. The City-maintained trails present on the project site also serve bicyclists.

Transit Facilities. The project site is currently served by OCTA Bus Route 91, which runs along Junipero Serra Road and Camino Capistrano near the project site. Route 91 provides transportation to and from Laguna Hills to San Clemente. Route 91 has bus stops at the southwest and southeast corners of the intersection of Camino Capistrano/Junipero Serra Road, approximately 0.4 mile from the project site.

4.11.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to transportation that are relevant to the proposed project.

4.11.3.1 Federal Policies and Regulations

No federal regulations are applicable to the proposed project.

4.11.3.2 State Policies and Regulations

California Department of Transportation. Caltrans is responsible for the maintenance and operation of State routes and highways. Caltrans maintains a volume monitoring program and reviews local agencies' planning documents (such as this Draft EIR) to assist in its forecasting of future volumes and congestion points. The Guide for the Preparation of Traffic Impacts Studies published by Caltrans is intended to provide a consistent basis for evaluating traffic impacts to State facilities.

Caltrans released a *VMT-Focused Transportation Impact Study Guide* (May 20, 2020) that recommends use of the Governor's Office of Planning and Research (OPR)[2] recommendations for land use projects and plans. For transportation projects, Caltrans has suggested that any increase in VMT would constitute a significant impact for transportation projects. This has been referred to as the "Net Zero VMT threshold."

[2] In 2024, OPR was renamed as the Office of Land Use and Climate Innovation (LCI).

Senate Bill 375. As a means to achieve the statewide emission reduction goals set by Assembly Bill 32 ("The California Global Warming Solutions Act of 2006"), SB 375 ("The Sustainable Communities and Climate Protection Act of 2008") directs the California Air Resources Board (CARB) to set regional targets for reducing GHG emissions from cars and light trucks. Using the template provided by the State's Regional Blueprint program to accomplish this goal, SB 375 seeks to align transportation and land use planning to reduce VMT through modified land use patterns. There are five basic directives of the bill: (1) creation of regional targets for GHG emissions reduction tied to land use, (2) a requirement that regional planning agencies create a sustainable communities strategy (SCS) to meet those targets (or an Alternative Planning Strategy if the strategies in the SCS would not reach the target set by CARB), (3) a requirement that regional transportation funding decisions be consistent with the SCS, (4) a requirement that the Regional Housing Needs Allocation numbers for municipal general plan housing element updates must conform to the SCS, and (5) CEQA exemptions and streamlining for projects that conform to the SCS.

Senate Bill 743. SB 743 was signed into law in 2013 and fundamentally changed the way transportation impacts under CEQA are analyzed. It required the OPR to "prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the [CEQA] guidelines …establishing criteria for determining the significance of transportation impacts of projects" to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

On December 28, 2018, the Natural Resources Agency adopted Section 15064.3 of the *State CEQA Guidelines*, which establishes specific criteria for evaluating a project's transportation impacts and states that "vehicle miles traveled is the most appropriate measure of transportation impacts". It gives agencies the "discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure" provided that "[a]ny assumptions used to estimate vehicle miles traveled… should be documented and explained in the environmental document prepared for the project." Section 15064.3 further states that except for certain transportation projects, "a project's effect on automobile delay shall not constitute a significant environmental impact." See *Citizens for Positive Growth & Preservation v. City of Sacramento (2019) 43 Cal. App. 5th 609, 626* (holding that a general plan's impact on LOS, which effectively measures automobile delay, can no longer constitute a significant environmental impact).

Additionally, OPR issued a technical advisory memorandum in December 2018 that includes general guidance and information for lead agencies to use in implementing SB 743, including choosing VMT methodology and establishing VMT thresholds. The City has adopted guidelines for VMT analysis to comply with CEQA required assessments of transportation impacts.

***State CEQA Guidelines,* Section 15064.3, Subdivision (b).** In January 2018, OPR submitted a proposal for comprehensive updates to the *State CEQA Guidelines* to the California Natural Resources Agency. The submittal included proposed updates related to the analysis of greenhouse gas (GHG) emissions, energy, transportation impacts pursuant to SB 743, and wildfires, as well as revisions to Section 15126.2(a) in response to the California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal. 4th 369*. On December 28, 2018, the updated *State CEQA Guidelines* went into effect.

As part of the update to the *State CEQA Guidelines*, Section 15064.3 was added and codifies that project-related transportation impacts are typically best measured by evaluating the project's VMT. Specifically, subdivision (b) focuses on specific criteria related to transportation analysis and is divided into four subdivisions: (1) land use projects, (2) transportation projects, (3), qualitative analysis, and (4) methodology. Subdivision (b)(1) provides guidance on determining the significance of transportation impacts of land use projects using VMT; projects located within 0.5 mile of high quality transit should be considered to have a less than significant impact. Subdivision (b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every project type; in these cases, a qualitative analysis may be used. Subdivision (b)(4) stipulates that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT.

4.11.3.3 Regional Regulations

Orange County Congestion Management Program. The Orange County Transportation Authority (OCTA) is a multimodal transportation agency that began in 1991 with the consolidation of seven separate agencies. OCTA serves Orange County residents and travelers by providing the following: countywide bus and paratransit service; Metrolink rail service; the 91 Express Lanes; freeway, street, and road improvement projects; individual and company commuting solutions; motorist aid services; and regulation of taxi operations. State law requires that a Congestion Management Program (CMP) be developed, adopted, and updated biennially for every county that includes an urbanized area, and requires that it include every city and the county government within that county. As the Congestion Management Agency for Orange County, OCTA is responsible for implementing the Orange County CMP. OCTA adopted the CMP in 1991 to reduce traffic congestion and to provide a mechanism for coordinating land use and development decisions in Orange County. Compliance with the CMP requirements ensures a city's eligibility to compete for State gas tax funds for local transportation projects

4.11.3.4 Location Regulations

City's Amended Administrative Policy No. 310. The *City's Amended Administrative Policy No. 310, Preparation and Use of Traffic Assessment Guidelines for VMT Analysis and LOS Traffic Impact Study* (TA Guidelines), establishes the guidelines for preparation and use of traffic assessments in the City for evaluating transportation impacts of proposed development, including both Vehicle Miles Traveled (VMT) analysis. Its purpose is to ensure that City staff and decision-makers receive accurate, consistent, and comprehensive information regarding the potential traffic effects associated with development proposals.

Under City Administrative Policy No. 310, projects that generate a minimum number of daily or peak-hour trips (e.g., 200 daily or 20 peak hour) are required to prepare a traffic impact analysis consistent with the policy's guidelines, unless the City Traffic Engineer determines through a sensitivity study that the project would have no measurable impact. The policy also requires coordination with the City Traffic Engineer early in the traffic study process to define scope and methodology.

For VMT, City Administrative Policy No. 310 incorporates the *City's VMT Guidelines and Thresholds Technical Memorandum*, which includes recommended screening criteria, analysis methodology, significance thresholds, and potential mitigation strategies for CEQA compliance with Senate Bill 743. This integration reflects the City's adoption of VMT as the primary metric for analyzing transportation impacts under CEQA, consistent with state law.

City Administrative Policy No. 310 also maintains consistency requirements with the Orange County Congestion Management Plan (CMP) for trip generation data used in traffic reports, underscoring the importance of regional consistency in traffic analysis.

City of San Juan Capistrano General Plan. The Circulation and Environmental Justice Elements of the City's General Plan contain the following goals and implementing policies related to transportation that would be applicable to the proposed project:

- **Circulation Goal 1:** Provide a system of roadways that meets the needs of the community.
    - **Policy 1.1:** Provide and maintain a City circulation system that is in balance with the land uses in San Juan Capistrano.
    - **Policy 1.4:** Improve the San Juan Capistrano circulation system roadways in concert with land development to ensure sufficient levels of service.
- **Circulation Goal 3:** Provide an extensive public bicycle, pedestrian, and equestrian trails network.
    - **Policy 3.1:** Provide and maintain an extensive trails network that supports bicycles, pedestrians, and horses and is coordinated with those networks of adjacent jurisdictions.
- **Circulation Goal 4:** Minimize the conflict between the automobile, commercial vehicles, pedestrians, horses, and bicycles.
    - **Policy 4.2:** Provide traffic management improvements within areas where through traffic creates public safety problems
    - **Policy 4.3:** Install additional street improvements within areas where necessary to improve vehicular and non-vehicular safety.
- **Environmental Justice Goal 11:** Improve the pedestrian and bicycle network.
    - **Policy 11.2:** Where feasible and if funding exists, remove gaps and barriers in the walking and biking network and construct new and/or wider sidewalks where necessary.
- **Environmental Justice Goal 12:** Establish safe routes to parks.
    - **Policy 12.1:** In addition to schools, prioritize traffic calming and other improvements around parks and open space.

4.11.4 Methodology

4.11.4.1 Vehicle Miles Traveled Analysis

On December 28, 2018, the California Office of Administrative Law cleared the revised California *State CEQA Guidelines* for use. Among the changes to the guidelines was removal of vehicle delay and LOS from consideration under CEQA. Senate Bill (SB) 743 mandates that VMT replace LOS as the transportation metric under CEQA. As a result, the City amended its traffic assessment guidelines to require a VMT analysis for CEQA documents.[3]

A VMT screening was conducted to evaluate the proposed project based on the pre-established criteria outlined in the *City's Amended Administrative Policy No. 310, Preparation and Use of Traffic Assessment Guidelines for VMT Analysis and LOS Traffic Impact Study* (TA Guidelines). Per the City's TA Guidelines, there are five types of screening that lead agencies can apply to effectively screen projects from project-level assessment. These are summarized below:

- The project generates 200 or less weekday daily trips based on the current ITE *Trip Generation Manual*.
- The project is located within 0.5 mile of an existing major transit stop or a stop along an existing high-quality transit corridor.
- The project is a local serving retail use of 50,000 sf or less.
- The project is a locally serving public facility.
- The project consists of 100 percent affordable housing units.

Because the proposed project could not be screened out from a project-level VMT assessment, as discussed in more detail in Section 4.11.6, Project Impacts, below, a project-level VMT assessment was conducted using the latest of the Orange County Transportation Analysis Model (OCTAM), Version 5.1. OCTAM is a trip-based travel demand model that simulates travel behavior based on socioeconomic data, including household, population, and employment characteristics, to estimate trip generation and mode choice. The City's TA Guidelines also recommend using "Total VMT" for retail, private school/university, hotel/motel/inn land uses or transportation projects and indicates that a project will have a significant VMT impact if the project generates a net increase in total City VMT.

To accurately reflect the proposed project within the model, updates were made to the socioeconomic data for the Traffic Analysis Zone (TAZ) encompassing the project site. The proposed project would need to be isolated in its own TAZ (TAZ 1602) to estimate/determine the proposed project VMT. As OCTAM does not have the ability to split/add new TAZs, non-project socioeconomic data in the project TAZ were moved from the project TAZ 1602 to the adjacent TAZ 1610 in order to

[3] City of San Juan Capistrano. 2017. *City's Amended Administrative Policy No. 310, Preparation and Use of Traffic Assessment Guidelines for VMT Analysis and LOS Traffic Impact Study*.

isolate the proposed project in its own TAZ 1602. Only 60 full-time employees were included in the project TAZ 1602 for modeling.

As recommended in the City's TA Guidelines, model runs were conducted for both OCTAM base year (2019) and OCTAM future year (2050) without and with the proposed project. Because the NOP for the proposed project was issued on November 13, 2025, and existing traffic counts for the proposed project were collected in September 2025, the year 2025 was considered as the project base year for purposes of the VMT analysis. Since the OCTAM base year (2019) is not consistent with the proposed project base year (2025), per the City's TA Guidelines, linear interpolation between the OCTAM base year (2019) and OCTAM future year (2050) was conducted to determine the VMT results for the project base year (2025). In addition, no circulation/network modifications were included in the OCTAM network, except for the centroid connectors for the proposed project TAZ 1602 under the "With Project" scenarios. To represent project-site-specific access, the centroid connector on Camino Los Padres for the project TAZ 1602 were inactivated, while keeping the centroid connector on Camino Capistrano.

The OCTAM model run outputs show that there would be 269 visitors under base year (2019) and 253 visitors in the future year (2050). However, the proposed project would allow for a maximum of 499 visitors to the project site at any given time. In order to disclose the project VMT with up to 499 visitors, a scaling adjustment was performed outside the model. The scaling adjustment factor was calculated based on the OCTAM-estimated visitors associated with 60 project employees on a typical weekday and the anticipated up to 499 visitors.

4.11.5 Thresholds of Significance

The thresholds for impacts related to transportation used in this analysis are derived from Appendix G of the *State CEQA Guidelines*. The proposed project may be deemed to have a significant impact with respect to transportation if it would:

Threshold 4.11.1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;

Threshold 4.11.2: Conflict or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b);

Threshold 4.11.3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

Threshold 4.11.4: Result in inadequate emergency access.

4.11.6 Project Impacts

As discussed in Section 3.17 of the Initial Study (**Appendix B**), all roadway and roadway frontage improvements in and around the project site would be designed and constructed to satisfy all City requirements for street widths, corner radii, and intersection control, as well as incorporate design standards tailored specifically to site access requirements. During roadway design, northbound left

turn lanes would also be considered as well as restricting left turns out. In addition, all final site plans would be subject to review and approval by the City's Public Works and OCFA prior to issuance of building permits, and adherence to applicable requirements would ensure the proposed development would not include any sharp curves, dangerous driveway intersections, or visual obstructions for drivers negotiating roadway curves. Therefore, implementation of the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses (Threshold 4.11.3).

In addition, the Applicant would be required to design, construct, and maintain structures, roadways, and facilities that would provide for adequate emergency access and evacuation, consistent with the City's Municipal Code and Fire Code requirements. In addition, the proposed project would be required to implement a construction worksite traffic control plan during construction activities as a condition of approval, that complies with applicable engineering standards outlined in the Caltrans' California Manual of Uniform Traffic Control Devices,[4] ensuring that construction activities which may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. The existing access driveway south of the Swanner House would also act as a fire access road and would be designed to adequately accommodate fire trucks and apparatus and final site plans would be subject to review and approval by OCFA and the Orange County Sheriff's Department to ensure adequate emergency vehicle access to and within the project site prior the issuance of building permits. Therefore, implementation of the proposed project would not result in inadequate emergency access (Threshold 4.11.4).

As the Initial Study determined that the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses nor result in inadequate emergency access, these topics are not discussed further in this Draft EIR.

Threshold 4.11.1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects:

Construction. During construction, construction equipment and vehicles would be staged on-site. Although the proposed project does not include any characteristics (e.g., permanent road closure or long-term blocking of road access) that would physically impair or otherwise interfere with transit, roadways, bicycle facilities, and/or pedestrian facilities in the project vicinity, construction activities may require temporary lane or road closures on Camino Capistrano. However, as required by the Northwest Open Space (NWOS) Specific Plan and consistent with best construction site management practices, the proposed project would implement a construction worksite traffic control plan during construction activities that complies with applicable engineering standards outlined in the Caltrans'

[4] California Department of Transportation (Caltrans). 2014. *California Manual on Uniform Traffic Control Devices* (CA MUTCD). Revised April 1, 2025.

California Manual of Uniform Traffic Control Devices,[5] ensuring that construction activities which may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Therefore, construction of the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities during construction. Impacts would be **less than significant**, and no mitigation is required.

Operation. The proposed project would be required to comply with General Plan policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The proposed project would also be required to comply with City Administrative Policy No. 310, which establishes metrics for determining traffic impacts, consistent transportation-related goals and policies in the City's General Plan, and the Orange County CMP. The proposed project's consistency with these plans is described in detail below.

Compliance with the City's General Plan. The proposed project would be required to comply with transportation related goals and policies in the City's General Plan (refer to Section 4.11.3.4, above, for a list of goals and policies applicable to the proposed project) as described below.

Access to Legacy Ranch would be provided by two ingress/egress driveways from Camino Capistrano, including the existing access driveway south of the Swanner House and a proposed driveway that would provide access to the Community Building Core and entry road parking areas. The proposed project would also include a pedestrian bridge over Trabuco Creek that would connect the Community Building Core to the rest of the Legacy Ranch, a pedestrian bridge/driveway across a tributary to Trabuco Creek that transects the Community Building Core, internal decomposed granite roads, pedestrian paths, and new trail connections to the Trabuco Creek Trail throughout the project site. Further, as discussed below, the proposed project would be required to implement **Mitigation Measure TRA-1**, which would provide end-of-trip bicycle facilities and implement an employer-sponsored vanpool, all of which would reduce VMT. The VMT reduction measures detailed in **Mitigation Measure TRA-1** have the capacity to reduce the proposed project's VMT to below the City's VMT threshold. The inclusion of new pedestrian paths and trail connections as well as the end-of-trip bicycle facilities required by **Mitigation Measure TRA-1** would help to enhance the City's bicycle, pedestrian, and equestrian trails network and encourage the use of alternate modes of transportation (Circulation Element Goal 3 and Environmental Justice Element Goal 11).

In addition, the proposed project does not propose any improvements or alterations to the existing sidewalk and bicycle network in the vicinity of the project site. Proposed pedestrian paths and trails would connect to the existing pedestrian network and the proposed project would allow for the continuation of existing on-street (Class II) bicycle lanes provided on both sides of Camino Capistrano, the off-street bike path (Class I) provided on the east side of Rancho Viejo Road, and the on-street (Class II) bicycle lane provided on the north side of the segment of Junipero Serra Road between Camino Capistrano and the I-5 southbound off-ramp. These

[5] California Department of Transportation (Caltrans). 2014. *California Manual on Uniform Traffic Control Devices* (CA MUTCD). Revised April 1, 2025.

existing bicycle lanes also serve to connect the project site with surrounding residential, employment, commercial, and recreational destinations. Accordingly, the proposed project would be consistent with the City's goals of proving a circulation system that meets the needs of the community and minimizing conflict between vehicles, pedestrians, equestrians, and bicycles (Circulation Element Goals 1 and 4 and Environmental Justice Element Goals 4 and 12). Therefore, the proposed project would not conflict with applicable provisions in the City's General Plan Circulation Element.

Conformance with Administrative Policy No. 310. City Administrative Policy No. 310 requires development projects to conduct a transportation impact analysis to analyze conformance with the transportation strategies, goals, and policies in the General Plan and address adverse impacts to the transportation system. As previously discussed, a TIA was prepared for the proposed project, which is provided as **Appendix N** to this Draft EIR. The TIA was prepared in compliance with the objectives and methodologies set forth in the City's TA Guidelines; the City's General Plan Circulation Element and Growth Management Element; the OCTA Orange County CMP; and applicable provisions of CEQA in order to identify the potential traffic impacts resulting from implementation of the proposed project, and prescribed mitigation to reduce any potential traffic impact.

As discussed under Threshold 4.11.2, below, the proposed project would result in a significant impact related to VMT, even with implementation of VMT reduction measures required by **Mitigation Measure TRA-1**, as it cannot be guaranteed that the project's employees would use the end-of-trip bicycle facilities or employer-sponsored vanpool program as the use of these facilities and programs cannot be monitored and enforced. There are no additional feasible or enforceable mitigation measures that would reduce project VMT, and operation of the proposed project would result in a **significant and unavoidable** VMT impact. As Section 15064.3 of the *State CEQA Guidelines* codifies the use of VMT as the appropriate metric for evaluating the project-related transportation impacts, and the proposed project's VMT impacts would be considered significant and unavoidable, implementation of the proposed project would result in adverse impacts to the transportation system.

As previously discussed, the purpose of City Administrative Policy No. 310 is to ensure that City staff and decision-makers receive accurate, consistent, and comprehensive information regarding the potential traffic effects associated with development proposals. Because a project-specific TIA was prepared, consistent with the guidance contained in City Administrative Policy No. 310, , implementation of the proposed project would not result in conflicts with City Administrative Policy No. 310.

Conformance with the Orange County CMP. Within San Juan Capistrano, the CMP Highway System includes one arterial – Ortega Highway. The Ortega Highway/Interstate 5 (I-5) ramp intersection, located approximately 1.4 miles southeast of the project site, is the only CMP intersection in the City. As part of preparation of the TIA, study area intersections were identified through coordination with City staff and it was determined that the Ortega Highway/I-5 ramp intersection did not need to be analyzed as part of the TIA due to its distance from the project site and because the intersection does not provide direct regional access to the project site. Accordingly, the proposed project is not expected to result in any impacts to this intersection

and no further analysis of project-related impacts on CMP roadway segments and/or intersections is required. Therefore, the proposed project would not result in conflicts with the Orange County CMP, and no mitigation would be required.

Overall, based on the above analysis, implementation of the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, with implementation of **Mitigation Measure TRA-1.** Impacts would be **less than significant with mitigation incorporated**.

Threshold 4.11.2: Would the project conflict or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b)?

Significant and Unavoidable.

Discussion of Effects: According to Section 15064.3(a) of the *State CEQA Guidelines*, project-related transportation impacts are generally best measured by evaluating the project's VMT. VMT refers to the amount and distance of automobile travel attributable to a project.

As discussed above, a VMT screening was conducted to evaluate the proposed project based on the pre-established criteria outlined in the City's TA Guidelines. Per the City's TA Guidelines, there are five types of screening that lead agencies can apply to effectively screen out projects from project-level assessment. These are summarized below:

- The project generates 200 or less weekday daily trips based on the current ITE *Trip Generation Manual*.
- The project is located within 0.5 mile of an existing major transit stop or a stop along an existing high-quality transit corridor.
- The project is a local serving retail use of 50,000 sf or less.
- The project is a locally serving public facility.
- The project consists of 100 percent affordable housing units.

The project site is not located within 0.5 mile of an existing major transit stop or a stop along an existing high-quality transit corridor and the proposed project is not a local serving retail use, a locally serving public facility, and does not include any residential uses. Therefore, the proposed project cannot be screened out from a project-level VMT assessment based on these adopted screening criteria.

As part of the TIA prepared for the proposed project (**Appendix N**), a trip generation analysis was first conducted to determine the number of trips that would occur following implementation of the proposed project. The proposed project's trip generation forecast is based on average rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (12th Edition, 2025) for Land Use Code 495 (Recreational Community Center) and from trip rates obtained from the Traffic

Impact Analysis prepared for Distrito La Novia-San Juan Meadows, a similar equestrian facility in the region.

As shown in **Table 4.11.A: Project Trip Generation Summary**, the proposed project has the potential to generate approximately 1,104 daily trips, including 73 trips in the a.m. peak hour (48 inbound and 25 outbound) and 119 trips in the p.m. peak hour (56 inbound and 63 outbound).

Because implementation of the proposed project has the potential to generate approximately 1,104 daily trips, the proposed project cannot be screened out from a project-level VMT assessment based on this adopted screening criteria.

As the proposed project cannot be screened out from a project-level VMT assessment based on any adopted screening criteria, a project-level VMT analysis was conducted using the latest OCTAM, Version 5.1. **Table 4.11.B: Project and City Total VMT Comparison,** below, shows the VMT results for the proposed project.

Table 4.11.A: Project Trip Generation Summary

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
Equestrian Center[2]		stable/stall	2.28	0.69	0.31	0.13	0.46	0.54	0.28
Recreational Community Center		tsf	28.82	0.66	0.34	2.02	0.48	0.52	2.89
Project Trip Generation									
Equestrian Core									
Equestrian	*149*	*stall*	*340*	*13*	*6*	*19*	*19*	*23*	*42*
Chapel Core									
Chapel	3.000	tsf	86	4	2	6	4	5	9
Ranch House	6.300	tsf	182	8	5	13	9	9	18
		Total	*268*	*12*	*7*	*19*	*13*	*14*	*27*
Swanner House Core[3]									
Agricultural Core[4]									
Event Barn Core									
Event Barn	*7.200*	*tsf*	*208*	*10*	*5*	*15*	*10*	*11*	*21*
Community Building Core									
Community Building	*10.000*	*tsf*	*288*	*13*	*7*	*20*	*14*	*15*	*29*
Trails/Natural Core[5]									
		Total	**1,104**	**48**	**25**	**73**	**56**	**63**	**119**

Source: LSA (2026)

[1] Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 12th Edition (2025). Land Use Code 495 - Recreational Community Center

[2] Trip rates obtained from Table 5-3 of the Traffic Impact Analysis for Distrito La Novia-San Juan Meadows (LLG, December 2009).

[3] Swanner House is an existing use and will be preserved as a part of the proposed project. Therefore, no additional trips will be generated for typical weekday operations.

[4] The Agricultural Core primarily consists of agricultural uses and a catering facility that would only operate during special events. Therefore, no additional trips will be generated for typical weekday operations.

[5] The Trails/Natural Core uses would serve as an amenity and a connection to all other cores. Therefore, no additional trips will be generated for typical weekday operations.

tsf = thousand square feet (or thousand-square-foot)

Table 4.11.B: Project and City Total VMT Comparison

VMT Analysis Scenario	VMT Rate	
	VMT	Metric
OCTAM Base Year (2019) No Project Total City VMT[1]	1,549,339	Total VMT
OCTAM Future Year (2050) No Project Total City VMT[1]	1,814,982	Total VMT
VMT Threshold: Project Base Year (2025) No Project Total City VMT[2]	**1,600,754**	Total VMT
OCTAM Base Year (2019) Plus Project Total City VMT[3]	1,551,390	Total VMT
OCTAM Future Year (2050) Plus Project Total City VMT[3]	1,817,180	Total VMT
Project VMT Rate: Project Base Year (2025) Plus Project Total City VMT[2]	**1,602,833**	Total VMT
Above or Below VMT Threshold	**Above**	
Significant Impact?	**Yes**	
VMT Reduction Required	**2,079 (0.13%)**	

Source: LSA (2026).
[1] Obtained using "No Project" LSA model runs (OCTAM Version 5.1).
[2] Linearly interpolated between OCTAM base year (2019) and OCTAM future year (2050) model runs.
[3] Obtained using "With Project" LSA model runs (OCTAM Version 5.1) and adjusted/scaled to account for 499 visitors.
OCTAM = Orange County Transportation Analysis Model
VMT = vehicle miles traveled

As shown in **Table 4.11.B**, in the project base year (2025), the proposed project's total City VMT (1,602,833) is higher than the threshold (1,600,754) and would result in a net increase of 2,079 (0.13 percent). Therefore, the proposed project would have a **potentially significant** VMT impact. To address this potentially significant impact, the proposed project would be required to implement feasible Transportation Demand Management (TDM) measures to reduce project VMT, as provided for in **Mitigation Measure TRA-1**.

The California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA Handbook) is utilized for identifying various VMT mitigation measures that are both applicable and feasible. Providing end-of-trip bicycle facilities and an employer-sponsored vanpool program, as required by **Mitigation Measure TRA-1,** would reduce project-related VMT. In addition, the CAPCOA Handbook includes a number of other measures that, when implemented, can reduced project-related VMT.

Mitigation Measure TRA-1 **Transportation Demand Management.** Prior to the issuance of building permits, the project Applicant shall submit a Transportation Demand Management (TDM) Plan to the City of San Juan Capistrano City Engineer for review and approval. The TDM Plan shall include Vehicle Miles Traveled (VMT) traffic reduction measures, consistent with the California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA Handbook), that shall be implemented in order

to reduce project-generated VMT to below the City's VMT threshold. The VMT reduction measures contained in the TDM Plan shall include the following, which may reduce the project's total VMT by 7.71 percent:

- **Provide End-of-Trip Bicycle Facilities.** The project Applicant shall install and maintain end-of-trip bicycle facilities (e.g., bicycle parking, bike lockers, showers, and personal lockers) to encourage commuting by bicycle, thereby reducing VMT and GHG emissions. CAPCOA Handbook measure "T-10. Provide End-of-Trip Bicycle Facilities" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the TIA prepared for the project, this measure may reduce the project's VMT by 0.07 percent.

- **Provide Employer-Sponsored Vanpool.** The project Applicant shall implement an employer-sponsored vanpool service. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting. This measure would shift from long-distance, single-occupied vehicles to shared vehicles, reducing overall commute VMT and reducing GHG emissions. CAPCOA Handbook measure "T-11. Provide Employer-Sponsored Vanpool" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the TIA prepared for the project, this measure may reduce the project's VMT by 7.65 percent.

In addition, the following additional VMT reduction measures included in the CAPCOA Handbook can be implemented:

- **Provide Pedestrian Network Improvement.** The project Applicant can install new pedestrian paths/sidewalks on Camino Capistrano along the entire length of the project frontage, which results in approximately 0.61 mile of new sidewalk/pedestrian access. The integration of sidewalks and pedestrian paths that would connect the proposed project to the external pedestrian network around the project site would allow for connection with the surrounding community and easy access without vehicular dependency, thereby enhancing the City's active transportation network. CAPCOA Handbook measure "T-18. Provide Pedestrian Network Improvement" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the Traffic Impact Analysis (TIA) prepared for the project, this measure may reduce the project's VMT by 0.19 percent.

- **Implement Commute Trip Reduction Program (Voluntary).** The project Applicant can implement a voluntary commute trip reduction (CTR) program. The CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation (e.g., carpooling, taking transit, walking, and bicycling), thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-5. Implement Commute Trip Reduction Program (Voluntary)" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Implement Commute Trip Reduction Marketing.** The project Applicant can implement a marketing strategy that promotes a CTR program. Information sharing and marketing promote and educate employees about alternative travel choices (e.g., carpooling, taking transit, walking, and biking), thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-7. Implement Commute Trip Reduction Marketing" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Provide Ridesharing Program.** The project Applicant can implement and fund a ridesharing program and establish a permanent transportation management association. Ridesharing encourages carpooled vehicle trips, replacing single-occupancy vehicle trips, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-8. Provide Ride Sharing Program" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT

reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Implement Subsidized or Discounted Transit Program.** The project Applicant can provide subsidized or discounted, or free transit passes for employees. This measure would encourage the use of transit by reducing the cost for choosing transit, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-9. Implement Subsidized or Discounted Transit Program" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the subsidy amount and the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Provide Additional Electric Vehicle Charging Infrastructure.** The project Applicant can install onsite electric vehicle chargers in an amount beyond what is required by the latest California Green Building Standards (CALGreen). Electric vehicle chargers enable Plugin-Hybrid Electric Vehicles to drive a larger share of VMT in electric mode. The latest CALGreen, California Building Code, requires provision of infrastructure to accommodate electric vehicle chargers for land use developments. Additional electric charging stations, beyond CALGreen requirements, can be considered as a GHG mitigation measure according to CAPCOA. Although it is understood that provision of electric charging stations would not reduce VMT, it would reduce GHG, which can be considered equivalent to reduction in VMT. CAPCOA Handbook transportation measure "T-14. Provide Electric Vehicle Charging Infrastructure" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the number of chargers that would be installed at the project site and the total number of vehicles that would access the project site per day, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

According to the CAPCOA Handbook and based on project-specific VMT reduction analysis included in the TIA prepared for the project, the provision of end-of-trip bicycle facilities would reduce the proposed project's VMT by 0.07 percent and the implementation of an employer-sponsored vanpool would reduce the proposed project's VMT by 7.65 percent. The implementation of these two measures would be required by **Mitigation Measure TRA-1**.

While implementation of several additional measures, including a voluntary commute trip reduction (CTR) program and a marketing strategy that promotes such a program, may potentially help in some reduction in project VMT, no project-specific VMT reduction has been attributed to these measures due to lack of data needed on the percentage of the project's employees who would be eligible for the CTR program. Similarly, implementation and funding of a ridesharing program and a permanent transportation management association may also potentially help in some reduction in project VMT, no project-specific VMT reduction has been attributed to these measures due to lack of data on the percentage of the project's employees who would be eligible for the program. The provision of subsidized or discounted, or free transit passes for employees may also potentially help to reduce the project's VMT. Again, no project-specific VMT reduction has been attributed to this measure because there is insufficient information regarding the subsidy amount and the percentage of the project's employees who would be eligible for the program. Finally, implementation of additional EV chargers in a number beyond that required by the latest CALGreen standards may potentially help in some reduction in project VMT; however, no project-specific VMT reduction has been attributed to this measure due to lack of data on the number of EV chargers that would be installed and the total number of vehicles that access the project site per day.

Assuming that the provision of end-of-trip bicycle facilities and the implementation of an employer-sponsored vanpool would achieve a maximum 7.71 percent VMT reduction, the reduction achieved would reduce the proposed project's VMT to below the City's VMT threshold.

However, it cannot be guaranteed that the proposed project's employees would use the end-of-trip bicycle facilities or employer-sponsored vanpool program as the use of these facilities and programs cannot be monitored and enforced. Therefore, the VMT reduction provided by this measure may not be achieved and the proposed project would therefore result in a **significant and unavoidable** transportation impact related to VMT. As there are no additional feasible or enforceable mitigation measures that would reduce project VMT, operation of the proposed project would result in a **significant and unavoidable** transportation impact related to VMT.

4.11.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for transportation. The cumulative impact area for transportation is the City of San Juan Capistrano, including the cumulative projects listed in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures.

As discussed above, VMT analysis was conducted for the proposed project as part of the TIA (**Appendix N**). The results of this analysis determined that implementation of the proposed project would result in a significant VMT impact, even with implementation of the VMT mitigation measures

provided in **Mitigation Measure TRA-1**. Although the implementation of the VMT reduction measures provided in **Mitigation Measure TRA-1** could reduce the proposed project's operational VMT to below the City's threshold, it cannot be guaranteed that the project's employees would use the end-of-trip bicycle facilities or employer-sponsored vanpool program. This is because the use of these facilities and programs cannot be monitored and enforced. Therefore, the proposed project's VMT impact would be significant and unavoidable. As there are no additional feasible or enforceable mitigation measures that would reduce project VMT, operation of the proposed project would result in a significant and unavoidable transportation impact related to VMT. Pursuant to the *Technical Advisory On Evaluating Transportation Impacts In CEQA* prepared by the OPR,[6] if a project individually has a significant VMT impact, then it also has a significant cumulative VMT impact. Therefore, the cumulative VMT impact associated with implementation of the proposed project would be **significant and unavoidable**.

In addition, each development proposal received by the City, including those listed in **Table 4.A: Cumulative Projects,** is required to undergo individual environmental review pursuant to CEQA, including project-specific transportation and VMT analysis, and would be reviewed for consistency with the City's General Plan Circulation Element, City Administrative Policy No. 310, and the Orange County CMP. In addition, development of the cumulative projects listed in **Table 4.A** would be required to comply with existing regulations, including the City's Municipal Code and General Plan policies that have been adopted to minimize impacts related to transportation and circulation, as well as any applicable federal, State and regional regulations.

Overall, because the proposed project would result in a significant and unavoidable VMT impact, even with implementation of **Mitigation Measure TRA-1**, the proposed project's potential impacts related to transportation are **cumulatively considerable**.

4.11.8 Level of Significance Prior to Mitigation

Impacts related to transportation would be potentially significant without implementation of mitigation.

4.11.9 Regulatory Compliance Measures and Mitigation Measures

4.11.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.11.9.2 Mitigation Measures

The proposed project would be required to implement the following mitigation measure.

Mitigation Measure TRA-1 **Transportation Demand Management.** Prior to the issuance of building permits, the project Applicant shall submit a Transportation Demand Management (TDM) Plan to the City of San Juan Capistrano City Engineer for review and approval. The TDM Plan shall include

[6] Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA,* Section C. December.

Vehicle Miles Traveled (VMT) traffic reduction measures, consistent with the California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA Handbook), that shall be implemented in order to reduce project-generated VMT to below the City's VMT threshold. The VMT reduction measures contained in the TDM Plan shall include the following, which may reduce the project's total VMT by 7.71 percent:

- **Provide End-of-Trip Bicycle Facilities.** The project Applicant shall install and maintain end-of-trip bicycle facilities (e.g., bicycle parking, bike lockers, showers, and personal lockers) to encourage commuting by bicycle, thereby reducing VMT and GHG emissions. CAPCOA Handbook measure "T-10. Provide End-of-Trip Bicycle Facilities" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the TIA prepared for the project, this measure may reduce the project's VMT by 0.07 percent.

- **Provide Employer-Sponsored Vanpool.** The project Applicant shall implement an employer-sponsored vanpool service. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting. This measure would shift from long-distance, single-occupied vehicles to shared vehicles, reducing overall commute VMT and reducing GHG emissions. CAPCOA Handbook measure "T-11. Provide Employer-Sponsored Vanpool" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the TIA prepared for the project, this measure may reduce the project's VMT by 7.65 percent.

In addition, the following additional VMT reduction measures included in the CAPCOA Handbook can be implemented:

- **Provide Pedestrian Network Improvement.** The project Applicant can install new pedestrian paths/sidewalks on Camino Capistrano along the entire length of the project frontage, which results in approximately 0.61 mile of new sidewalk/pedestrian access. The integration of sidewalks and pedestrian paths that would connect the proposed project to the external pedestrian network around the project site would allow for connection with the surrounding community and easy access without vehicular dependency, thereby enhancing the City's active transportation network. CAPCOA Handbook measure "T-18.

Provide Pedestrian Network Improvement" can be used to quantify the VMT reduction associated with the implementation of this measure. Based on analysis provided in the Traffic Impact Analysis (TIA) prepared for the project, this measure may reduce the project's VMT by 0.19 percent.

- **Implement Commute Trip Reduction Program (Voluntary).** The project Applicant can implement a voluntary commute trip reduction (CTR) program. The CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation (e.g., carpooling, taking transit, walking, and bicycling), thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-5. Implement Commute Trip Reduction Program (Voluntary)" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Implement Commute Trip Reduction Marketing.** The project Applicant can implement a marketing strategy that promotes a CTR program. Information sharing and marketing promote and educate employees about alternative travel choices (e.g., carpooling, taking transit, walking, and biking), thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-7. Implement Commute Trip Reduction Marketing" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Provide Ridesharing Program.** The project Applicant can implement and fund a ridesharing program and establish a permanent transportation management association. Ridesharing encourages carpooled vehicle trips, replacing single-occupancy vehicle trips, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-8.

Provide Ride Sharing Program" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Implement Subsidized or Discounted Transit Program.** The project Applicant can provide subsidized or discounted, or free transit passes for employees. This measure would encourage the use of transit by reducing the cost for choosing transit, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "T-9. Implement Subsidized or Discounted Transit Program" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the subsidy amount and the percentage of the project's employees who would be eligible for the program, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

- **Provide Additional Electric Vehicle Charging Infrastructure.** The project Applicant can install onsite electric vehicle chargers in an amount beyond what is required by the latest California Green Building Standards (CALGreen). Electric vehicle chargers enable Plugin-Hybrid Electric Vehicles to drive a larger share of VMT in electric mode. The latest CALGreen, California Building Code, requires provision of infrastructure to accommodate electric vehicle chargers for land use developments. Additional electric charging stations, beyond CALGreen requirements, can be considered as a GHG mitigation measure according to CAPCOA. Although it is understood that provision of electric charging stations would not reduce VMT, it would reduce GHG, which can be considered equivalent to reduction in VMT. CAPCOA Handbook transportation measure "T-14. Provide Electric Vehicle Charging Infrastructure" can be used to quantify the VMT reduction associated with the implementation of this measure. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the number of chargers that would be installed at the project site

and the total number of vehicles that would access the project site per day, which would be required to quantify the VMT reduction for this measure, is not available. Due to the lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

4.11.10 Level of Significance after Mitigation

Even with implementation of **Mitigation Measure TRA-1**, impacts related to transportation would be **significant and unavoidable**.

4.12 TRIBAL CULTURAL RESOURCES

This section identifies the known tribal cultural resources on the project site and vicinity, evaluates potentially significant impacts to such resources that may result from implementation of the proposed Legacy Ranch Project (proposed project), and recommends mitigation measures to reduce the severity of potentially significant impacts. California Public Resources Code (PRC) Section 21074 defines "tribal cultural resources" as:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either: (A) included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register); or (B) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1 or

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

Information in this section is based on the Cultural Resources Assessment (CRA) prepared by LSA in January 2026,[1] Native American consultation efforts pursuant to Senate Bill (SB) 18 and Assembly Bill (AB) 52, and the City of San Juan Capistrano General Plan. The CRA is provided as **Appendix F.**

4.12.1 Scoping Process

The City of San Juan Capistrano (City) received one comment during the scoping period for this Draft Environmental Impact Report (EIR) (November 13 through December 15, 2025) concerning the proposed project's potential impacts on tribal cultural resources, as discussed below. In addition, no comments pertaining to tribal cultural resources were submitted during the public scoping meeting held on November 19, 2025.

- Native American Heritage Commission (NAHC), November 14, 2025, outlined the City's tribal consultation requirements under Assembly Bill 52 and Senate Bill 18.

Scoping comments are provided in **Appendix A** to this Draft EIR.

4.12.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, Orange County.

4.12.2.1 Prehistoric Background

In general, prehistoric cultural developments in Southern California have occurred gradually and have shown long-term stability. Accordingly, developing chronologies and applying them to specific locales can be problematic. In the Southern California area, researchers have used changing artifact assemblages and evolving ecological adaptations to divide regional prehistory into four time periods,

[1] LSA. 2026. *Archaeological Survey of the 65.5-Acre Legacy Ranch Project, 30093 Camino Capistrano, San Juan Capistrano, Orange County, California*. January.

or “cultural horizons:” the Early Period, the Milling Stone Period, the Intermediate Period, and the Late Period.

Early Period (Prior to 6000 BC). The Early Period (also known as the Hunting Period) covers the interval from the first presence of humans in Southern California until post-glacial times (5500 to 6000 BC). Artifacts and cultural activities from this period represent a predominantly hunting culture. Diagnostic artifacts from this period include extremely large, often fluted bifaces associated with use of the spear and the atlatl. In Southern California, important Early Period sites have been found near prehistoric Lake Mohave along the Colorado River and along the San Dieguito River in San Diego County. Early sites dating to approximately 10,000 years ago and older have also been documented in Santa Barbara County and the northern Channel Islands. Evidence at sites dating to the Terminal Pleistocene and Early Holocene increasingly suggests that the early inhabitants of coastal California relied on marine resources and seeds.

Milling Stone Period (6000 BC–3000 BC). The transition from the Early Period to the Milling Stone Period is marked by an increased emphasis on the processing of seeds and edible plants and is estimated to have occurred between 6000 BC and 3000 BC. Wild seeds and edible plants formed the primary food source during this period, with only limited use of shellfish and faunal resources. During this period, plant resources were processed using deep-basined mills and handstones, hence the term Milling Stone Period. Milling Stone Period settlements were larger and were occupied for longer periods of time than Early Period sites. Milling Stone Period mortuary practices included both flexed and extended burials, as well as reburials. Grave offerings from this time were few, although rock cairns were sometimes placed over the bodies.

Diagnostic artifacts recovered from Milling Stone Period archaeological sites include metates, manos, and large projectile points, indicating the continued use of darts and atlatls. Among the more enigmatic artifacts from this period are discoidals and cogged stones. Discoidals are round to ovoid groundstones with flat or slightly convex faces and edges, while cogged stones are discoidals with serrated edges resembling the teeth on gears. Both types of artifacts appear sometime around 4000 BC and are dated to the Milling Stone Period. Although the purpose of cogged stones and discoidals is not known, they may have had a ceremonial function.

Two possible scenarios could explain cultural changes that occurred during the Milling Stone Period. It is possible that both scenarios occurred simultaneously in different geographical areas. In some regions such as western San Diego County, Milling Stone cultures may have evolved gradually as the earlier hunting peoples learned to exploit a wider variety of food resources. In other coastal areas, people migrating from interior regions may have brought new seed and plant food processing technologies with them as they moved to the coast. Evidence for such migrations may be found in climatic data. The onset of the Milling Stone Period corresponds to an interval of warm, dry weather known as the Altithermal, during which many inland lakes disappeared. This would have made inland regions less habitable, triggering the coastal migrations thought to have occurred at this time.

Intermediate Period (3000 BC–AD 500). By approximately 3000 BC, the inhabitants of Southern California were exploiting a diverse array of food resources, including seeds and edible plants, shellfish, fish, and mammals. Along the coast, a greater reliance was placed on marine food resources as evidenced by the recovery of near-shore and pelagic (deep-water) fish remains from

archaeological sites. In the interior regions such as the Mojave Desert, the return of cooler, moister conditions led to increased populations along streams and lakes. Hunting appears to have been the primary food-gathering activity in these interior areas. The best-known Intermediate Period sites are located at Pinto Basin in northeastern Riverside County.

Although the mano and metate are still used, Intermediate Period sites are characterized by the appearance of the mortar and pestle. In inland and desert sites, projectile points are generally still large although somewhat smaller than in older sites, but small Rose Spring projectile points appear during the later portion of this period. The introduction of the mortar and pestle may indicate an increased reliance on acorns as a food source, while small projectile points suggest that the bow and arrow was in limited use. Intermediate Period burials were generally flexed in a face down position, although a site at Big Tujunga Wash in the San Fernando Valley contained both reburials under stone cairns and cremations.

Late Period (AD 500–1769). The Late Period, which began approximately AD 500, witnessed a number of important cultural developments in Southern California, including the concentration of larger populations in settlements and communities, greater utilization of the available food resources, and the development of regional subcultures. Cremation was the preferred method of interment during the Late Period, and elaborate mortuary customs and abundant grave goods were common. Other cultural traits diagnostic of the Late Period include an increased use of the bow and arrow, steatite containers, circular shell fishhooks, asphaltum as an adhesive, bone tools and personal ornaments of bone, shell, and stone. Because many of these artifacts are also recovered from earlier periods, other indicators must sometimes be used to distinguish Late Period sites. Among the most useful of these indicators are lithic artifacts manufactured from obsidian. Obsidian from Obsidian Buttes at the Salton Sea was used sporadically in the manufacture of lithic artifacts until sometime after AD 1000, when its use in the Los Angeles Basin became much more common.

A number of the cultural elements found in Southern California during the Late Period have been linked to the migration of Uto-Aztecan speaking peoples from the Great Basin; these traits include the manufacture of ceramics, the use of small triangular arrow points, and interment by cremation. The date of the Uto-Aztecan migration (which probably occurred in several successive waves over an extended period of time) remains uncertain; it has been dated as early as 2000 BC and as late as AD 700. Linguistic evidence suggests a date of AD 1 to 500. The latter part of the Late Period (AD 1200–1769) is often given its own period, the Protohistoric Period. General inferences about the use of plants and animals mostly come from archaeological and ethnographic research related to this period.

4.12.2.2 Ethnography

Gabrielino. At the time of European contact, the Gabrielino Indians inhabited most of what is now known as the Los Angeles Basin. The Gabrielino were one of the most extensive native groups in Southern California and much of what we know about native people comes from our knowledge of the Gabrielino.

The name Gabrielino refers to the Uto-Aztecan (Takic) speaking Native Americans who occupied an extensive area, inhabiting most of what are now Los Angeles and Orange Counties and who were

historically affiliated with Mission San Gabriel Arcángel. Today, some of the Gabrielino prefer to call themselves by their traditional name, Tongva. Their traditional tribal territory was situated partly in northern San Diego County and partly in southern Orange County. The boundaries were Las Pulgas Creek (south), Aliso Creek (north), the Pacific Ocean (west) and the Santa Ana Mountains (east). Villages were mostly along San Juan Creek, Trabuco Creek and San Mateo Creek. Gabrielino territory also included the watersheds of the Los Angeles River, San Gabriel River, and portions of the Santa Ana River; several smaller intermittent streams in the Santa Monica and Santa Ana Mountains; all of the Los Angeles Basin; the coast from Aliso Creek north to a point between Topanga and Malibu Creeks; and the islands of San Clemente, San Nicolas, and Santa Catalina.

The Gabrielino Indians practiced a hunter-gatherer lifestyle, and lived in permanent communities near the convergence of two or more environmental zones or habitats[2] with populations generally ranging from 50–100 inhabitants. They maintained permanent geographical territories that seem to have averaged 30 square miles, establishing seasonal camps along the coast and near bays and estuaries where they hunted primarily rabbit and deer, gathered shellfish and hunt waterfowl, and collected and processed plant foods such as acorns, buckwheat, chia, berries, and fruit.

In prehistory, the Acjachemen had a patrilineal society and lived in groups with other relatives. These groups had established claims to places including the sites of their villages and resource areas. Marriages were usually arranged from outside villages establishing a social network of related peoples in the region. There was a well-developed political system including a hereditary chief. Religion was an important aspect of their society. Religious ceremonies included rites of passage at puberty and mourning rituals. Houses were typically conical in shape and thatched with locally available plant materials. Work areas were often shaded by rectangular brush-covered roofs (ramada). Each village had a ceremonial structure in the center enclosed by a circular fence where all religious activities were performed.

Women are known to have been the primary gatherers of plant foods, but they also gathered shellfish and trapped small game animals. Men hunted large game, most small game, fished, and assisted with plant food gathering, especially of acorns. Adults were actively involved in making tools including nets, arrows, bows, traps, food preparation items, pottery and ornaments. Tribal elders had important political and religious responsibilities and were involved in education of younger members.

Gabrielino culture was characterized by an active and elaborate system of rituals and ceremonies. Rituals included individual rites of passage, village rites, seasonal ceremonies, and participation in the widespread Chinigchinich cult. The cult of the culture hero Chinigchinich was observed and recorded by Franciscan Friar Gerónimo Boscana during his residences at Missions San Juan Capistrano and San Luis Rey.

Juaneño. About 1,300 years ago, the Acjachemen (Juaneño), who were hunters and gatherers of the San Luis Rey Cultural Pattern, moved into southern Orange County. This native group south of the Gabrielino, and who inhabited a much smaller area than the Gabrielino, was the Juaneño. The

[2] Bean, Lowell John, and Charles R. Smith. 1978. Gabrielino. In R. Heizer ed., *Handbook of North American Indians*, Vol. 8, *California*, pp. 538–549. Smithsonian Institution, Washington, D.C.

Juaneño were affiliated with Mission San Juan Capistrano, after which they were named and they occupied the project site and vicinity. Some Juaneño refer to themselves as Acjachemen (alternative spellings: Acagchemem and Acjachemem), and one group is recognized at the State level as the Juaneño Band of Mission Indians, Acjachemen Nation.

The Juaneño inhabited the small area between the Gabrielino and Luiseño and states that Juaneño territory ran from Aliso Creek south along the coast to a point between San Onofre and Las Pulgas. Rather than having a distinct language, Juaneño speech was a dialect of Luiseño, and the dialectical differences between the Juaneño and Luiseño "did not prevent mutual understanding…" Juaneño and Gabrielino languages, however, were mutually unintelligible. Despite linguistic differences, though, it should be mentioned that the material culture and, in fact, most aspects of Gabrielino and Juaneño culture were nearly identical.

Although local variations in culture between Juaneño and Luiseño may have existed, it was a village-level difference rather than a tribal-level difference, suggesting only minor differences between Juaneño and Luiseño. In addition, the Juaneño were a subgroup of the greater Luiseño tribe and may be a coastal branch of the Luiseño. Major linguistic similarities existed between the Luiseño and Juaneño groups, and language differences between the Juaneño and Luiseño were far fewer than between the Juaneño and Gabrielino.

4.12.2.3 Project Site

The project site is currently developed with the historic Swanner House and the Putuidem Village, a partial reproduction of a local Native American village. Putuidem ("Putuidem" meaning "belly" or "the navel") was an important village of the Acjachemen people for thousands of years. The village acted as a central hub, holding great cultural and spiritual importance and influencing the development of other nearby settlements. The establishment of the nearby Mission San Juan Capistrano in 1776 dramatically affected Putuidem, resulting in a steep population decline due to enslavement, starvation, and disease.

Following the Mission Era, much of the village site was built over. The 2003 development of the JSerra Catholic High School, located across Camino Capistrano from the southern end of the project site, unearthed many human remains and artifacts. In December 2021, the City opened an approximately 1.5-acre cultural park including the replica village within the project site to honor Putuidem's legacy. The replica village features a traditional amphitheater with stone and log seating, replica kiicha dwellings with interpretive displays, and a "Mother Tree" canopy for ceremonies and education. The park serves dual functions as a venue for tribal ceremonies and private prayer days and a public educational resource to teach local history and Acjachemen traditions. Putuidem Village is listed on California's Native American Heritage Commission (NAHC) Sacred Lands File (SLF) and has been determined eligible for listing in the NRHP as a Traditional Cultural Property (TCP) due to its significance in the historic and ongoing cultural practices of the Acjachemen people, including ceremonies, storytelling, and communal gatherings, and its direct association with living tribes.

On September 3, 2025, a record and literature search was conducted at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton (CSUF). According to the results of the record and literature search, prior cultural resource work has resulted in the recording

of four cultural resources within the project site. These resources include one prehistoric resource, a large habitation site with numerous loci occupying primarily the western side of the project site near the railroad track.

No other cultural resources, including those of tribal origin, were identified during the pedestrian survey of the project site conducted by LSA archaeologist Ivan Strudwick on October 22 and November 6, 2025.

4.12.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to tribal cultural resources that are relevant to the proposed project.

4.12.3.1 Federal Policies and Regulations

No federal policies or regulations related to tribal cultural resources apply to the proposed project.

4.12.3.2 State Policies and Regulations

California Health and Safety Code Section 7050.5. California Health and Safety Code Section 7050.5 states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the Coroner's authority. If the human remains are of Native American origin, the County Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC is then required to identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Public Resources Code (PRC) Section 5097.5. Section 5097.98 of the PRC states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5 (discussed above), shall immediately notify those persons (i.e., the MLD) it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site. See also *State CEQA Guidelines* Section 15064.5(d) and (e).

Assembly Bill 52 Tribal Consultation. California PRC Sections 21080.3.1 and 21080.3.2 and Chapter 532, Statutes 2014 (i.e., AB 52), require that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. AB 52, specifically PRC Section 21080.3.1(d), requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether an EIR (among other types of

environmental documents) is required for a project. The bill specifies examples of mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. The bill makes the above provisions applicable to projects that have a Notice of Preparation (NOP) filed on or after July 1, 2015. By requiring the lead agency to consider these effects relative to tribal cultural resources and to conduct consultation with California Native American tribes, this bill imposes a State-mandated local program.

Senate Bill 18. SB 18 (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to "provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."[3]

4.12.3.3 Regional Policies and Regulations

No regional policies or regulations related to tribal cultural resources apply to the proposed project.

4.12.3.4 Local Policies and Regulations

City of San Juan Capistrano General Plan. The Cultural Resources Element of the City's General Plan contains the following goal and implementing policy related to cultural and historical resources that would be applicable to the proposed project:

- **Cultural Resources Goal 1:** Preserve and protect historical, archaeological, and paleontological resources.
    - **Policy 1.1:** Balance the benefits of development with the projects' potential impacts to existing cultural resources.

City of San Juan Capistrano Municipal Code. Building and construction in the city are subject to the regulations of the City's Municipal Code. The following provisions of the City's Municipal Code are related to cultural and historical resources:

- **Article 3, Development Review Procedures, Section 9-2.327, Historical and Cultural Landmark Site Plan Review:** Section 9-2.327 of the City's Municipal Code provides for the protection, enhancement, perpetuation, and use of those areas, structures and objects within the City which, due to their historical or cultural significance or character, require special consideration in order to meet the goals and policies of the General Plan with regard to preservation of cultural resources.

City of San Juan Capistrano City Council Policy 601. On March 18, 1997, the San Juan Capistrano City Council adopted Police 601 guiding management of historic, archaeological, and paleontological resources in the city. The intent and purpose of Policy 601 is to establish specific procedures and

[3] Governor's Office of Planning and Research. 2005. Tribal Consultation Guidelines. November 14. <https://opr.ca.gov/docs/011414_Updated_Guidelines_922.pdf> (accessed January 2026).

policies to ensure that significant historic resources, either known or discovered during construction, will be preserved as a community resource in the most financially equitable method possible. This includes establishing administrative procedures for site surveys, review procedures to evaluate resource reports, procedures to ensure proper mitigation and monitoring, and to properly record resources with the City and proper research institutions.

4.12.4 Methodology

In order to identify tribal cultural resources on the project site and analyze potentially significant impacts associated with construction and implementation of the project, the City conducted Native American consultation in accordance with AB 52 and SB 18 requirements.

On July 2, 2025, a request for a search of the Sacred Lands File (SLF) was submitted to the Native American Heritage Commission (NAHC) in order to identify the presence of tribal cultural resources at the project site and in the vicinity and to obtain a list of Native American contacts for consultation purposes. On July 17, 2025, the NAHC responded indicating the SLF search was positive for tribal cultural resources and provided a list of 17 tribes for consultation. Requests for consultation were sent to all 17 tribes via certified mail on March 11, 2025. Each mailing had a return receipt mailer attached, and 15 of the return receipt mailers were returned within a week of the mailer being sent. Two mailers were returned to the City as undeliverable, and emails were sent to these tribes on April 8, 2025.

4.12.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project could have a significant adverse impact with respect to tribal cultural resources if it would:

Threshold 4.12.1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

(i) listed or eligible for listing in the California Register, or in a local register of historical resources as defined in PRC Section 5020.1(k); or

(ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.12.6 Project Impacts

Threshold 4.12.1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: (i) listed or eligible for listing in the California Register, or in a local register of historical resources as defined in PRC Section 5020.1(k); or (ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.?

Less Than Significant With Mitigation Incorporated.

Discussion of Effects: Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires Lead Agencies evaluate a project's potential to impact "tribal cultural resources." Such resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources." AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource." Senate Bill (SB) 18 (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process.

The intent is to "provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."[4] The City consulted with tribal representatives traditionally or culturally affiliated with the project site pursuant to the requirements outlined in AB 52 and SB 18.

On July 2, 2025, a request for a search of the Sacred Lands File (SLF) was submitted to the Native American Heritage Commission (NAHC) in order to identify the presence of tribal cultural resources at the project site and in the vicinity and to obtain a list of Native American contacts for consultation purposes. On February 27, 2025, the NAHC responded indicating the SLF search was positive for tribal cultural resources and provided a list of 17 tribes for consultation.

The City sent letters via certified mail to the list of 17 tribes provided by the NAHC on March 14 and 17, 2025, pursuant to SB 18. Each mailing had a return receipt mailer attached, and 15 of the return receipt mailers were returned within a week of the mailer being sent. Two mailers were returned to the City as undeliverable, and emails were sent to these tribes on April 8, 2025. No request for

[4] Governor's Office of Planning and Research. 2005. Tribal Consultation Guidelines. November 14, <https://opr.ca.gov/docs/011414_Updated_Guidelines_922.pdf> (accessed August 19, 2022).

further consultation was received. On July 7, 2025, following the 90-day consultation period, the City closed tribal consultation under SB 18.

Requests for consultation were also sent via certified mail to three tribes which submitted requests for notice of consultation opportunities under AB 52. Letters were sent to the Juaneño Band of Mission Indians Acjachemen Nation - Belardes and the Soboba Band of Luiseño Indians on March 14, 2025. No request for further consultation was received from either of these tribes. On April 16, 2025, following the 30-day consultation period, the City closed tribal consultation for these two tribes under AB 52. On October 8, 2025, the City sent the request for consultation letter via certified mail to the Torres Martinez Desert Cahuilla Indians. At this time, the Torres Martinez Desert Cahuilla Indians has not requested a consultation, and, after the 30-day consultation period, the City closed tribal consultation for this tribe under AB 52.

On November 20, 2025, after the close of the tribal consultation under AB 52, the Juaneño Band of Mission Indians Acjachemen Nation-Belardes representative emailed the City requesting a meeting to discuss the proposed project and potential impacts on tribal cultural resources. On December 19, 2025, the City met with Joyce Perry, representative for the Juaneño Band of Mission Indians Acjachemen Nation-Belardes. At this meeting, the tribe requested prioritizing the avoidance of tribal cultural resources present at the project site and Native American monitoring for all grading and trenching activities. The tribe also requested the proposed project identify a centralized repatriation and reburial area within the project site and that the proposed project ensure the equitable distribution of any tribal cultural resources that are not repatriated among tribes.

As discussed in Section 4.4, Cultural Resources, the proposed project includes the preservation of the existing uses on the project site, including the Putuidem Village, which is designated as a TCP due to its significance in the historic and ongoing cultural practices of the Acjachemen people, and does not include any alterations to the site. Accordingly, the proposed project has been designed to avoid known tribal cultural resources at the project site. In addition, as discussed in Section 4.4, construction of the proposed project would be required to implement **Mitigation Measure CUL-1**, which details provisions in the event that unknown cultural resources are discovered during ground-disturbing construction activities, and **Regulatory Compliance Measure CUL-1**, which details provisions for if human remains are encountered at the project site. Adherence to these measures would ensure that potential impacts to previously unknown cultural resources, including tribal cultural resources and human remains, would be less than significant.

The remainder of the requests from the Juaneño Band of Mission Indians Acjachemen Nation, including Native American monitoring of all grading and trenching activities and the identification of a centralized repatriation and reburial area within the project site, are detailed in **Mitigation Measures TCR-1** and **TCR-2**, below.

Mitigation Measure TCR-1

Native American Monitoring of Ground Disturbing Activities. Prior to the issuance of any grading permit for the proposed project, the Applicant shall retain a Native American Monitor . The Applicant shall allow 45 days from initial contact with the interested tribe(s) to enter into a contract with the

tribe(s) for monitoring services. If the Applicant can demonstrate to the City they were unable to secure an agreement with the interested tribe(s), of the if the contracted tribe(s) fails to fulfill its obligation under the contract terms, then the Applicant may retain an alternative qualified tribal monitor approved by the City. "Ground-disturbing activity" shall include, but is not limited to, demolition, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching on the project site.

A copy of the executed monitoring agreement shall be submitted to the Development Services Director of the City of San Juan Capistrano, or their designee, prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. The tribal monitor shall also provide appropriate insurance certificates.

The monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the interested tribe(s). Monitor logs shall identify and describe any discovered Tribal Cultural Resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCRs"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant/City upon written request to the Native American Monitor. A final monitoring report shall be provided to the City upon project completion.

On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the tribe(s) from a designated point of contact for the Applicant/City that all ground-disturbing

activities and phases that may involve ground-disturbing activities in native (previously undisturbed) soil has occurred (i.e., no tribal monitoring shall be required for landscaping activities occurring after completion of project grading and trenching, as this soil will have been previously monitored) or in connection with the project are complete; or (2) a determination and written notification by the tribe(s) to the Applicant/City that no future, planned construction activity and/or development/construction phase associated with the project possesses the potential to impact TCRs.

Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Native American Monitor and/or archaeologist. The tribe(s) will coordinate with other tribes that are culturally affiliated with the project area to recover and retain all discovered TCRs in the form and/or manner agreed to. Note that this measure is not intended to conflict with the regulatory compliance process outlined in **Regulatory Compliance Measure CUL-2**. In the unlikely event that human remains are encountered at the project site, the City and Project Applicant shall be required to follow the appropriate process outlined in CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98.

Mitigation Measure TCR-2

Repatriation and Reburial of Tribal Cultural Resources. Prior to the issuance of any grading or ground-disturbing permits, the City and Project Applicant, in consultation with the Native American Monitor, shall identify and designate an area within the project site that is suitable for long-term protection and confidentiality to be reserved for the potential repatriation and reburial of Native American cultural items, including, but not limited to, artifacts, grave goods, items of patrimony, or human remains, should such resources be encountered during implementation of the

proposed project, unless otherwise directed by the interested tribe(s). The designated repatriation and reburial area shall be documented in the project plans and shall be protected from future ground disturbance, except as may be necessary to accommodate repatriation activities.

With implementation of **Mitigation Measures CUL-1, TCR-1** and **TCR-2**, along with adherence to **Regulatory Compliance Measure CUL-1,** potential impacts to known and unknown tribal cultural resources would be **less than significant with mitigation incorporated**.

4.12.7 Cumulative Impacts

Defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and reasonably foreseeable projects in an area of interest. The cumulative impact area for tribal cultural resources is the South Orange County region, including the City of San Juan Capistrano.

Potential impacts of the proposed project to unknown tribal cultural resources, when combined with other past, present, and reasonably foreseeable projects in the city and on land traditionally used by culturally affiliated tribes, including those listed **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures, could contribute to a cumulatively significant impact due to the overall loss of tribal cultural resources in the region. However, each development proposal received by the City is required to undergo individual environmental review pursuant to CEQA, including AB 52 outreach for those environmental documents that would be subject to public review. Furthermore, impacts of other projects on tribal cultural resources are generally site-specific because they result from ground-disturbing activities that would require a site-specific impact analysis to determine the nature and extent of the resources and identify appropriate mitigation measures that would reduce or avoid significant impacts.

Ground disturbance associated with future development facilitated by the proposed project could result in a potentially significant impact to tribal cultural resources if previously undiscovered tribal cultural resources are unearthed during ground-disturbing activity, including human remains of Native American origin. However, future development facilitated under the proposed project would be required to implement **Mitigation Measure CUL-1** and adhere to **Regulatory Compliance Measure CUL-1,** which would ensure that, if archaeological cultural resources are identified during excavation, they would be evaluated, documented, and studied in accordance with standard archaeological practice and archaeological deposits and human remains would be treated in a culturally appropriate manner and in accordance with appropriate State codes and regulations.

Similar to the proposed project, ground disturbance associated with cumulative projects could result in potentially significant impacts on previously unidentified archaeological sites and associated human remains that may be unearthed. However, when the City considers future development proposals, these proposals would undergo environmental review pursuant to CEQA and when necessary, mitigation measures would be adopted as appropriate. In most cases, this environmental review and compliance with project conditions of approval and relevant policies of the General Plan

would ensure that significant impacts on tribal cultural resources would be avoided or otherwise mitigated to less than significant levels. Further, discretionary projects would be required to engage in tribal consultation in order to identify and mitigate site-specific impacts on tribal cultural resources.

Collectively, recent past, approved, and probable future projects that may occur in the vicinity, including the proposed project, would not result in a cumulative increase in impacts on tribal cultural resources or human remains, because these resources would be avoided or otherwise removed, analyzed, and reported (i.e., by a qualified archaeologist). In addition, through required tribal consultation, additional mitigation measures for ensuring tribal cultural resources are not significantly impacted would also be developed and prescribed on a project-specific basis.

Based on the information in this section (Section 4.12, Tribal Cultural Resources), and in Section 4.4 Cultural Resources, and for the reasons summarized above, the proposed project would not contribute to significant adverse cumulative impacts related to tribal cultural resources when considered together with other cumulative development. Therefore, the cumulative impact on tribal cultural resources would be **less than cumulatively considerable**.

4.12.8 Level of Significance Prior to Mitigation

Impacts on tribal cultural resources would be potentially significant without incorporation of mitigation.

4.12.9 Regulatory Compliance Measures and Mitigation Measures

4.12.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are applicable to the proposed project.

Regulatory Compliance Measure CUL-1	**Human Remains.** (See Section 4.4, Cultural Resources.)

4.12.9.2 Mitigation Measures

The proposed project would be required to implement the following mitigation measures.

Mitigation Measure TCR-1	**Native American Monitoring of Ground Disturbing Activities.** Prior to the issuance of any grading permit for proposed project, the Applicant shall retain a Native American Monitor approved by the interested tribes. The Applicant shall allow 45 days from initial contact with the interested tribe(s) to enter into a contract with the tribe(s) for monitoring services. If the Applicant can demonstrate to the City they were unable to secure an agreement with the interested tribe(s), of the if the contracted tribe(s) fails to fulfill its obligation under the contract terms, then the Applicant may retain an

alternative qualified tribal monitor approved by the City. "Ground-disturbing activity" shall include, but is not limited to, demolition, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching on the project site.

A copy of the executed monitoring agreement shall be submitted to the Development Services Director of the City of San Juan Capistrano, or their designee, prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. The tribal monitor shall also provide appropriate insurance certificates.

The monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the interested tribe(s). Monitor logs shall identify and describe any discovered Tribal Cultural Resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCRs"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant/City upon written request to the Native American Monitor. A final monitoring report shall be provided to the City upon project completion.

On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the tribe(s) from a designated point of contact for the Applicant/City that all ground-disturbing activities and phases that may involve ground-disturbing activities in native (previously undisturbed) soil has occurred (i.e., no tribal monitoring shall be required for landscaping activities occurring after completion of project grading and trenching, as this soil will have been

previously monitored) or in connection with the project are complete; or (2) a determination and written notification by the tribe(s) to the Applicant/City that no future, planned construction activity and/or development/construction phase associated with the project possesses the potential to impact TCRs.

Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Native American Monitor and/or archaeologist. The tribe(s) will coordinate with other tribes that are culturally affiliated with the project area to recover and retain all discovered TCRs in the form and/or manner agreed to. Note that this measure is not intended to conflict with the regulatory compliance process outlined in Regulatory Compliance Measure CUL-2. In the unlikely event that human remains are encountered at the project site, the City and Project Applicant shall be required to follow the appropriate process outlined in CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98.

Mitigation Measure TCR-2

Repatriation and Reburial of Tribal Cultural Resources. Prior to the issuance of any grading or ground-disturbing permits, the City and Project Applicant, in consultation with the Native American Monitor, shall identify and designate an area within the project site that is suitable for long-term protection and confidentiality to be reserved for the potential repatriation and reburial of Native American cultural items, including, but not limited to, artifacts, grave goods, items of patrimony, or human remains, should such resources be encountered during implementation of the proposed project, unless otherwise directed by the interested tribe(s). The designated repatriation and reburial area shall be documented in the project plans and shall be protected from future ground disturbance, except as may be necessary to accommodate repatriation activities.

Mitigation Measure CUL-1 **Cultural Resources Monitoring and Accidental Discovery.** (See Section 4.4, Cultural Resources.)

4.12.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to tribal cultural resources with implementation of **Mitigation Measures CUL-1, TCR-1** and **TCR-2**.

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4.13 UTILITIES AND SERVICE SYSTEMS

This section identifies the utility providers within whose jurisdiction the proposed project is located and evaluates the potential impacts of the proposed Legacy Ranch Project (proposed project) on utilities and service systems. This section addresses the following utilities:

- Wastewater and Potable Domestic Water (Santa Margarita Water District [SMWD])
- Storm Drainage and Flood Control (Orange County Flood Control District [OCFCD])
- Solid Waste (CR & R Inc. Environmental Services)
- Electricity (San Diego Gas & Electric Company [SDG&E])
- Natural Gas (Southern California Gas Company [SoCalGas])
- Telecommunication (AT&T, Cox Communications, and Verizon.)

The analysis in this section is based on information from the California Emissions Estimator Model (CalEEMod) version 2022.1 modeling results contained in **Appendix C**.

4.13.1 Scoping Process

The City of San Juan Capistrano (City) received one comment during the scoping period for this Draft Environmental Impact Report (EIR) (November 13 through December 15, 2025) concerning the proposed project's potential impacts relating to utilities and service systems, as discussed below. In addition, no comments pertaining to utilities and service systems were submitted during the public scoping meeting held on November 19, 2025.

- Larry Kramer, December 9, 2025, raised concerns related to the ability of the existing sewer line to serve the proposed project.

Scoping comments are provided in **Appendix A** to this Draft EIR.

4.13.2 Existing Environmental Setting

The approximately 65.5-acre project site is located at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, Orange County. The project site is bounded by single-family residential uses to the north, Camino Capistrano to the east, a senior living residential community (The Groves Apartments) to the south, and an Orange County Transportation Authority (OCTA)-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route.

The irregularly shaped project site is currently developed with the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site and there are three wells owned and maintained by the Santa Margarita Water District (SMWD) located on the project site. Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano with Oso Creek located to the west. In addition, an unnamed tributary to Trabuco Creek (Tributary 1) is located on the eastern portion of the project site, south of the existing barn and associated storage containers. Another concrete lined tributary (Tributary 2) to Trabuco Creek, lies further to the south on the project site. Approximately 14 acres of

the project site, encompassing Trabuco Creek and its banks, are covenanted with conservation easements. Vegetation includes grasses, shrubs, and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek. I

4.13.2.1 Water

Potable and recycled water service in the City is provided by SMWD. The SMWD provides drinking water and recycled water to over 200,000 residents in South Orange County. SMWD's service area covers approximately 100 square miles and serves the cities of San Juan Capistrano, Mission Viejo, Rancho Santa Margarita, and the communities of Coto de Caza, Las Flores, Ladera Ranch, Rancho Mission Viejo, and Talega in San Clemente.[1] A small portion of northwestern San Juan Capistrano and an unincorporated area within the City's Sphere of Influence is located within the Moulton Niguel Water District (MNWD); however; the SMWD is under contract to provide water to the area.[2]

The SMWD relies almost entirely on imported water from the Metropolitan Water District of Southern California (MWD) and has a storage capacity of almost 430 million gallons of drinking water, representing one of the largest storage capacities in Orange County. The SMWD delivers potable water provided from three treatment plants:

- **Robert B. Diemer Treatment Plant:** Operated by the MWD and typically fed with a blend of State Water Project and Colorado River Aqueduct water depending on regional conditions;
- **Baker Water Treatment Plant:** Operated by Irvine Ranch Water District and fed by the Colorado River Aqueduct but can be fed with water from the local Irvine Lake in the event of an emergency;
- **San Juan Ground Water Plant:** Operated and owned by SMWD as of November 2021 and fed by local groundwater.

In addition, SMWD has recently implemented the following projects to reduce its dependence on imported water and allow for local control of its water supply:[3]

- Trampas Canyon Reservoir (completed in 2020);
- Lake Mission Viejo (became California's first swimming lake to use advanced treated water in 2016);

1 Santa Margarita Water District. n.d. Are You In Our Service Area? <https://www.smwd.com/327/Are-You-In-Our-Service-Area> (accessed October 2025).
2 City of San Juan Capistrano. 1999. *San Juan Capistrano General Plan, Public Services and Utilities Element*. December 14.
3 Santa Margarita Water District. n.d. Drinking Water. <https://www.smwd.com/308/Drinking-Water> (accessed October 2025).

- Upper Chiquita Reservoir (the region's first emergency drinking water storage reservoir, completed in 2011);

- South County Pipeline (SMWD maintains this primary pipeline that transports water to much of south Orange County).

According to SMWD's Urban Water Management Plan (UWMP), adopted by SMWD on June 18, 2021 SMWD's 2020 water use (potable, raw, and recycled) totaled 30,083 acre-feet (af), with single-family residential uses accounting for approximately 14,057 af (60 percent) of the total potable water use.[4] In addition, according to the 2020 UWMP, SMWD's water use (potable, raw, and recycled) is projected to be 36,898 af in 2030, 40,853 af in 2035, 40,341 af in 2040, and 40,168 in 2045.[5] In addition, the 2020 UWMP indicates that SMWD's water supplies are projected to meet full-service demands now and into the future. Further, MWD's 2020 UWMP confirms that MWD can meet the projected full-service demands of its member agencies during normal years, a single dry year, and multiple dry years.[6]

4.13.2.2 Wastewater

The SMWD and MNWD provide wastewater and sewer services in the City. However, SMWD annexed the City's water utilities system into its service area in 2021. Therefore, SMWD is the sole wastewater service provider for the project site and the rest of the City. SMWD's existing wastewater collection system consists of approximately 665 miles of collection pipes, 21 lift stations, and three water reclamation plants.

Currently, SMWD collects and treats more than 10 million gallons of wastewater per day (mgd) from residential and commercial customers throughout its service area.[7] The SMWD utilizes three different treatment plants to appropriately treat the wastewater, including the Oso Creek Water Reclamation Plan, the Chiquita Water Reclamation Plan, and the J.B. Latham Treatment Plant (JBLTP). According to the SMWD, all wastewater flows from the City are treated at the JBLTP in Dana Point, which is operated by the South Orange County Wastewater Authority (SOCWA).[8] The total treatment capacity of JBLTP is approximately 13 mgd consisting of preliminary treatment, primary treatment, secondary treatment, anaerobic digestion and solids dewatering.

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4 Santa Margarita Water District. 2021. *2020 Urban Water Management Plan*, Table 4-1 Retail: Use for Potable – 2020 ACTUAL and Table 4-3 Retail: Total Gross Water Use (Potable and Non-Potable (AF). June.

5 Santa Margarita Water District. 2021. *2020 Urban Water Management Plan*, Table 4-3 Retail: Total Gross Water Use (Potable and Non-Potable (AF). June.

6 Santa Margarita Water District. 2021. *2020 Urban Water Management Plan*. June.

7 Santa Margarita Water District. n.d. Wastewater. <https://www.smwd.com/310/Wastewater> (accessed October 2025).

8 Ibid.

The SOCWA maintains several ongoing projects to ensure the reliability of its infrastructure. SOCWA developed the JBLTP Facility Plan which would include ongoing facility improvements at JBLTP. Improvements at JBLTP would consist of the following:[9]

- Retrofit of the aeration basins
- Reconstruction of the co-generation system
- Construction of a fifth anaerobic digester
- Modification of the existing thickening system
- Implementation of structural and seismic improvements
- Construction of a Plant 1/Plant 2 flow control structure
- Retrofit of the secondary sedimentation basins
- Replacement of the Plant 2 480-volt power distribution system
- Implementation of chemically enhanced primary treatment

4.13.2.3 Stormwater

Storm drainage collection and conveyance facilities and regional flood control facilities in the vicinity of the project site are maintained by both the City and the Orange County Flood Control District (OCFCD). Under existing conditions, the majority of the project site consists of pervious surface area. Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano. Oso Creek is located west of the project site. The project site is relatively flat, and under existing conditions, the natural drainage at the project site is generally toward the southeast to discharge into Trabuco Creek, conforming to the natural topography. Within the project site and in the general vicinity, Trabuco Creek exists in its natural state with earthen banks. Approximately 0.9 mile south of the project site, Trabuco Creek becomes channelized before discharging into San Juan Creek, approximately 2.1 miles south of the project site. San Juan Creek is a flood-control channel that directs stormwater southwest and discharges into the Pacific Ocean at Doheny State Beach via Capistrano Bight.

The City and the project site are within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego RWQCB implements the National Pollutant Discharge Elimination System (NPDES) program in the City, primarily through the Regional MS4 Permit which prohibits discharges, sets limits on pollutants being discharged into receiving waters, and requires implementation of technology-based standards. The Regional MS4 Permit requires co-permittees to prepare project-specific WQMPs and implement Site Design, Source Control, and Low Impact Development (LID) Best Management Practices (BMPs) in order to treat and manage stormwater.

4.13.2.4 Solid Waste

Solid waste disposal services in the city are provided by CR&R. Solid waste in the city, including the project site, is disposed of at the Prima Deshecha Landfill, which is operated by Orange County Waste and Recycling (OC Waste and Recycling). The Prima Deshecha Landfill, located at 32250 Avenida La Pata in San Juan Capistrano, opened in 1976 and features 1,530 total acres, with 697

[9] South Orange County Wastewater Authority. 2025. J.B Latham Treatment Plant Ongoing Facility Improvements. <https://www.socwa.com/ongoing-projects/j-b-latham-treatment-plant-ongoing-facility-improvements/> (accessed October 2025).

acres for waste disposal. The landfill accepts a maximum of 4,000 tons of solid waste per day and as of September 1, 2023, had a remaining capacity of 128,800,000 cubic yards.[10] The maximum permitted capacity is 172,100,000 cubic yards and, according to OC Waste and Recycling, has a projected capacity to serve residents and businesses until approximately 2102.[11]

4.13.2.5 Electricity

According to the most recent data available, in 2024, California's electricity was generated primarily by natural gas (34.01 percent), solar (21.30 percent), wind (11.89 percent), large hydroelectric (11.06 percent), nuclear (9.92 percent), geothermal (4.60 percent), coal (2.21 percent), biomass (1.94 percent), small hydroelectric (1.52 percent), and other unspecified sources. Total electric generation in California in 2024 was 216,181 gigawatt-hours (GWh), which is up approximately 0.26 percent from the 2023 total generation of 215,623 GWh.[12,13]

Electricity in the City is provided by San Diego Gas & Electric (SDG&E). SDG&E serves over 3.7 million people across a 4,100-square-mile area in San Diego and southern Orange counties.[14] According to the California Energy Commission (CEC), total electricity consumption in the SDG&E service area in 2024 was 16,786 GWh (5,332 GWh for the residential sector and 11,454 GWh for the non-residential sector).[15] Total electricity consumption in Orange County in 2024 was 675,141 GWh (224,381 GWh for the residential sector and 450,760 GWh for the non-residential sector).[16]

4.13.2.6 Natural Gas

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[17]

Natural gas in the City is provided by Southern California Gas Company (SoCalGas). SoCalGas provides natural gas to approximately 21.8 million people in a 24,000-square-mile service area

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10 California Department of Resources Recycling and Recovery (CalRecycle). 2025. Solid Waste Information System Facility Detail. <https://calrecycle.ca.gov/SWFacilities/> (accessed October 2025).

11 Ibid.

12 California Energy Commission (CEC). 2024. *2024 Total System Electric Generation.* <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2024-total-system-electric-generation> (accessed October 2025).

13 California Energy Commission (CEC). 2023. *2023 Total System Electric Generation.* <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation> (accessed October 2025).

14 San Diego Gas & Electric (SDG&E). n.d. About Us. <https://www.sdge.com/more-information/our-company/about-us> (accessed October 2025).

15 California Energy Commission (CEC). 2024. Electricity Consumption. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0> (accessed October 2025).

16 Ibid.

17 California Energy Commission (CEC). n.d. Supply and Demand of Natural Gas in California. <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california> (accessed October 2025).

throughout Central and Southern California, from Visalia to the Mexican border.[18] According to the CEC, total natural gas consumption in the SoCalGas service area in 2024 was 4,959 million therms.[19] Total natural gas consumption in Orange County in 2024 was 561.7 million therms.[20]

4.13.2.7 Telecommunications Facilities

The primary cable and telephone service providers available within the project site's vicinity (and, more generally, within San Juan Capistrano) are AT&T, Cox Communications, and Verizon. These services are privately operated and offered to each location in the City for a fee defined by the provider.

4.13.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to utilities and service systems that are relevant to the proposed project.

4.13.3.1 Federal Policies and Regulations

Clean Water Act. Pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.), the United States Army Corps of Engineers (USACE) is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the United States (including wetlands), which include those waters listed in 33 CFR § 328.3 (as amended in 80 *Federal Register* 3004, January 18, 2023).

Pursuant to Section 401 of the CWA, the Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board (SWRCB), is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the U.S. will not violate water quality standards." Water quality certification must be based on the finding that the proposed discharge will comply with applicable water quality standards.

The NPDES is the permitting program for discharge of pollutants into surface waters of the United States under CWA Section 402.

Safe Drinking Water Act. The Safe Drinking Water Act (SDWA) (42 U.S.C. § 300f et seq.) is intended to protect public health by regulating the nation's public drinking water supply. The Federal SDWA authorizes the United States Environmental Protection Agency (USEPA) to set national standards for drinking water to protect against both naturally occurring and man-made contaminants.

Resource Conservation and Recovery Act (42 USC § 6901 et seq.). The federal Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to ensure that solid and hazardous wastes are properly managed from their generation to their ultimate disposal or destruction.

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18 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www.socalgas.com/about-us (accessed February 2026).

19 California Energy Commission (CEC). 2025b. Natural Gas Consumption Dashboard. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1 (accessed February 2026).

20 Ibid.

Implementation of the RCRA has largely been delegated to federally approved state waste management programs and, under Subtitle D, further promulgated to local governments for management of planning, regulation, and implementation of nonhazardous solid waste disposal. The USEPA retains oversight of state actions under 40 CFR Parts 239–259. Where facilities are found to be inadequate, Section 256.42 requires that necessary facilities and practices be developed by the responsible state and local agencies, or by the private sector. In California, that responsibility was created under AB 939, the California Integrated Waste Management Act, in 1989.

4.13.3.2 State Regulations

California Integrated Waste Management Act of 1989. The California Integrated Waste Management Act of 1989 (Pub. Res. Code Division 30), enacted through Assembly Bill (AB) 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (PRC § 41780). The State determines compliance with this mandate to "divert" 50 percent of generated waste (which includes both disposed and diverted waste) through a complex formula. This formula requires cities and counties to conduct empirical studies to establish a "base year" waste generation rate against which future diversion is measured. The actual determination of the diversion rate in subsequent years is arrived at through deduction, not direct measurement: instead of counting the amount of material recycled and composted, the city or county tracks the amount of material disposed at landfills, then subtracts the disposed amount from the base year amount. The difference is assumed to be diverted (PRC § 41780.2).

Urban Water Management Planning Act. The Urban Water Management Planning Act (UWMP Act) (California Water Code (CWC), Division 6, Part 2.6, § 10610 et seq.) was enacted in 1983. The UWMP Act applies to municipal water suppliers (e.g., the EMWD) because it provides water service directly to more than 3,000 connections. The UWMP Act requires these suppliers to update their UWMP every 5 years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, dry, and multiple dry years.

Porter-Cologne Water Quality Control Act. The CWA places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish guidelines for the states to follow in developing their programs.

California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and the nine RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California's responsibility under the CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State

water policy. The Porter-Cologne Act also provides that an RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste. The City, including the project site, is within the jurisdictional boundaries of the Santa Ana RWQCB (Region 8).

California Toxics Rule (CTR). As stated previously, because California had not established a complete list of acceptable water quality criteria for toxic pollutants, USEPA Region IX established numeric water quality criteria for toxic constituents in the form of the CTR. The CTR provides water quality criteria for certain potentially toxic compounds for inland surface waters, enclosed bays, estuaries, and waters designated for human health or aquatic life uses. The CTR is often used by the RWQCBs when establishing water quality objectives and TMDLs. Although the CTR criteria do not apply directly to discharges of storm water runoff, they are utilized as benchmarks for toxics in urban runoff. The CTR is used as a benchmark to evaluate the potential ecological impacts of storm water runoff to receiving waters. The CTR establishes acute and chronic surface water quality standards for certain water bodies. Acute criteria provide benchmarks for the highest permissible concentration below which aquatic life can be exposed for short periods of time without negative effects. Chronic criteria provide benchmarks for an extended period of time (i.e., four days or more) without negative effects. The acute CTR criteria have a shorter relevant averaging period (less than four days) and provide a more appropriate benchmark for comparison for storm water flows.

CTR criteria apply to the receiving water body and are calculated based on the probable hardness values of the receiving waters. At higher hardness values for receiving waters, certain constituents (including copper, lead, and zinc) are more likely to be complexed (bound with) components in the water column. This in turn reduces the bioavailability and resulting potential toxicity of these metals.

General Construction Activity Storm Water Permit. The *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. WQ 2022-0057-DWQ, NPDES No. CAS000002* (Construction General Permit)[21], adopted by the SWRCB, regulates construction activity that includes clearing, grading, and excavation resulting in soil disturbance of at least one acre of total land area. The Construction General Permit authorizes the discharge of storm water to surface waters from construction activities.

The Construction General Permit requires that all developers of land where construction activities will occur over more than one acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three risk levels established in the Construction General Permit;

- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the United States;

[21] State Water Resources Control Board (SWRCB). National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. WQ 2022-0057-DWQ, NPDES No. CAS000002. September 8, 2022. Effective September 1, 2023.

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies BMPs that will reduce pollution in storm water discharges to the Best Available Technology/Economically Achievable/Best Conventional Pollutant Control Technology standards as described in the CWA;

- Perform inspections and maintenance of all BMPs; and

- Conduct storm water sampling, if required based on risk level.

To obtain coverage under the Construction General Permit, a project applicant must electronically file all permit registration documents with the SWRCB prior to the start of construction. Permit registration documents must include a:

- Notice of Intent (NOI);
- Risk Assessment;
- Site map;
- SWPPP;
- Annual fee; and
- Signed certification statement.

Typical BMPs contained in SWPPPs are designed to minimize erosion during construction, stabilize construction areas, control sediment, and control pollutants from construction materials. The SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

Sustainable Groundwater Management Act. The Sustainable Groundwater Management Act (SGMA) of 2014 is a comprehensive three-bill package that Governor Jerry Brown signed into California State law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention if necessary to protect the resource. The plan is intended to ensure a reliable groundwater supply for California for years to come.

The SGMA requires governments and water agencies of high- and medium-priority basins to halt overdrafts of groundwater basins. The SGMA requires the formation of local groundwater sustainability agencies (GSAs) that are required to adopt Groundwater Sustainability Plans to manage the sustainability of the groundwater basins.

California Water Conservation in Landscaping Act, Government Code § 65591 et seq. Pursuant to the Water Conservation in Landscaping Act of 2006 (Government Code § 65591 et seq.), cities and counties in California are required to adopt a water efficient landscape ordinance. Local ordinances are intended to reduce water use for landscaping and irrigation purposes and encourage the use of recycled and reclaimed water for these purposes. The California Department of Water Resources maintains a Model Water Efficient Landscape Ordinance (MWELO) (CCR 490 23 et seq.) after which local jurisdictions can model their ordinances.

California Water Recycling in Landscaping Act, Government Code § 65601 et seq. The California Water Recycling in Landscaping Act promotes the efficient use of water through the development of

water recycling facilities. This Act stipulates that landscape design, installation, and maintenance should be water efficient, and the use of potable domestic water for landscaped areas is considered a waste or unreasonable use of water if recycled water is available that meets the conditions described in Section 13550 of the CWC.

Senate Bill 610. SB 610 requires that detailed information regarding water availability is provided to relevant city and county decision-makers prior to approval of specified large development projects (as defined in Water Code 10912 [a]). Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to the California Environmental Quality Act.[22]

Senate Bill 1374. SB 1374 requires that the annual report submitted to the California Department of Resources Recycling and Recovery (CalRecycle) include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 required that CalRecycle adopt a model ordinance suitable for adoption by any local agency to require 50 to 74 percent diversion of construction and demolition waste materials from landfills by March 1, 2004. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CalRecycle's model by default. However, adoption of such an ordinance may be considered by CalRecycle when determining whether to impose a fine on a jurisdiction that has failed to implement its Source Reduction and Recycling Element (SRRE).

Assembly Bill 75. AB 75, passed in 1999, took effect on January 1, 2000. This bill adds new provisions to the PRC, mandating that State agencies develop and implement an Integrated Waste Management Plan (IWMP); it also mandates that community service districts providing solid-waste services report disposal and diversion information to the city, county, or regional agency in which the community service district is loaded.

Title 24 of the California Code of Regulations. Energy and water consumption by new buildings in California is regulated by the California Green Building Standards Code (CALGreen), which is embodied in CCR Title 24. Title 24 provides efficiency standards for new construction and the rehabilitation of both residential and nonresidential buildings, including building energy consumption, water conservation, and operational efficiencies. Title 24 regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting regarding both electricity and natural gas, while also regulating water consumption through the installation of efficient plumbing fixtures. The efficiency standards apply to both new construction and rehabilitation of both residential and nonresidential buildings. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed Title 24 Building Code

[22] California Department of Water Resources (DWR). 2003. *Guidebook for Implementation of SB 610 and SB 221 to Assist Water Suppliers, Cities, and Counties in Integrating Water and Land Use Planning*. October 10, 2003. <https://cawaterlibrary.net/document/guidebook-for-implementation-of-sb-610-and-sb-221-to-assist-water-suppliers-cities-and-counties-in-integrating-water-and-land-use-planning/> (accessed August 21, 2025).

requirements. The 2025 Standards went into effect January 1, 2026, following approval by the California Building Standards Commission.

Additionally, CALGreen Section 5.408.1 identifies that construction projects shall "recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent."

Assembly Bill 341. AB 341, enacted in 2011 and applicable beginning in 2012, changes the due date of the State agency waste management annual report to May. The bill makes a legislative declaration that it is the policy goal of the State of California that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020.

Public Health and Safety Code Part 9.5, Section 115700. Public Health and Safety Code Part 9.5, Section 115700, requires the proper decommissioning of inactive wells to prevent the contamination of groundwater. The section provides specifics for the casting, securing, and marking of wells and the surrounding area. This section also provides that at a minimum, permanently inactive wells shall be destroyed in accordance with standards developed by the DWR pursuant to CWC Section 13800 and adopted by the SWRCB or local agencies in accordance with CWC Section 13801. Minimum standards recommended by the DWR and adopted by the SWRCB or local agencies for the abandonment or destruction of groundwater monitoring wells or class one hazardous injection wells shall not be construed to limit, abridge, or supersede the powers or duties of the department, in accordance with CWC Section 13801.

4.13.3.3 Regional Regulations

Santa Margarita Water District 2020 Urban Water Management Plan. The SMWD 2020 UWMP provides long-term water planning to ensure adequate water supplies for existing and future demands of SMWD's service area. SMWD's service area encompasses approximately 62,674 acres in southern Orange County, including the cities of Mission Viejo, Rancho Santa Margarita, and San Clemente, and the communities of Coto de Caza, Esencia, Ladera Ranch, Las Flores, Trabuco Canyon, Sendero, and Wagon Wheel. The 2020 UWMP found that SMWD's water supplies are projected to meet full-service demands now and into the future.

4.13.3.4 Local Regulations

City of San Juan Capistrano General Plan. The Growth Management and Public Services & Utilities Elements of the City's General Plan contain the following goals and implementing policies related to utilities and service systems that would be applicable to the proposed project:

- **Growth Management Goal 1:** Coordinate rational and orderly growth that assures the economic and efficient provision of public services and infrastructure to new development.
    - **Policy 1.1**: Continue to implement service standards for public services and infrastructure which provide sufficient services to community residents and business.

- **Policy 1.2:** Approve only those development proposals for which there is sufficient funding through the developer, City, or other agency to provide a level of public service and infrastructure which meet the established goals.
- **Policy 1.3:** Monitor growth to ensure that service standards are achieved.

- **Public Services & Utilities Goal 6:** Provide sufficient levels of water and sewer service.
  - **Policy 6.1:** Provide sufficient levels of water and sewer service to meet the needs of the community.

- **Public Services & Utilities Goal 7:** Work effectively with providers of natural gas, electricity, telephone, cable television and solid waste disposal to provide sufficient levels of these services.
  - **Policy 7.1**: Work closely with providers of energy, communications and solid waste disposal in determining and meeting the needs of the community for energy, communications and solid waste disposal.
  - **Policy 7.2**: Encourage energy efficient development.
  - **Policy 7.3**: Encourage the expansion of telecommunications capabilities to promote economic development of the community.

4.13.4 Methodology

The impact analysis presented in this section evaluates potential physical impacts of the proposed project on utilities and service systems and considers whether implementation of the proposed project would result in the need for additional infrastructure and supplies based on data and adopted planning documents obtained through service providers and their respective websites and the City of San Juan Capistrano.

This analysis also includes CalEEMod outputs generated for the proposed project, which are included in **Appendix C** of this Draft EIR. The proposed project's energy usage, including electricity and natural gas, as well as the proposed project's anticipated water demand and estimates for wastewater and solid waste generation were calculated using CalEEMod version 2022.1.

4.13.5 Thresholds of Significance

The thresholds for utilities and service system impacts used in this analysis are consistent with Appendix G of the State Guidelines for the Implementation of CEQA of 1970 (*State CEQA Guidelines*). The proposed project may be deemed to have a significant impact on utilities and service system if it would:

Threshold 4.13.1: Require or result in the relocation or construction 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 4.13.2: Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;

Threshold 4.13.3: 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 4.13.4: 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; or

Threshold 4.13.5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.13.6 Project Impacts

As discussed in Section 3.19 of the Initial Study (**Appendix B**), the proposed project would comply with AB 1327, AB 939, AB 341, and all other applicable local, State, and federal solid waste disposal standards (Threshold 4.13.5). Therefore, this topic is not discussed further in this Draft EIR.

Threshold 4.13.1: Would the project require or result in the relocation or construction 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 Impact.

Discussion of Effects: The project site is located in an urbanized area of the city, adjacent to existing development, that is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, natural gas, and telecommunications infrastructure. As provided above, the project site is currently developed with the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village. The existing Swanner House currently generates demand for utilities, including water, wastewater treatment, stormwater drainage, electricity, natural gas, and telecommunications and is already connected to utilities infrastructure in the surrounding area.

The proposed project would develop the project site with the Legacy Ranch, which would consist of seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core. Each core would incorporate community amenities such as an equestrian center for horses and cattle, chapel and event barn for wedding ceremonies and events, working agricultural farm, farm shop, instructional classes, wellness activities, and recreational trails. The proposed project also includes the preservation of the existing uses on the project site, including the Putuidem Village, Swanner House, and Dr. John Cortese Dog Park, and would provide greater access to each of these existing elements. The proposed project's demand on utilities, including water, wastewater, storm drainage, electrical power, and natural gas is discussed below.

Water. Water service for the proposed project would be provided by the SMWD via an existing water service line located in Camino Capistrano. The SMWD provides drinking water and recycled water to over 200,000 residents in South Orange County. The majority of the city, including the project site, receives water service from the SMWD, which annexed the City's water utilities system into its service area in 2021. A small portion of northwestern San Juan Capistrano and an unincorporated area within the City's Sphere of Influence is located within the Moulton Niguel Water District (MNWD); however, the SMWD is under contract to provide water to these areas.[23]

Construction. During construction, short-term demand for water may occur during project demolition and grading activities, primarily for dust mitigation purposes. Water from the existing water lines in the vicinity of the project site would be used. Overall, short-term construction activities would require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. Therefore, construction of the proposed project would not require the construction of new or expanded water conveyance facilities. In addition, as discussed in Section 4.11, Transportation, the proposed project would be required to implement a construction worksite traffic control plan during construction activities that complies with applicable engineering standards outlined in the Caltrans' California Manual of Uniform Traffic Control Devices,[24] which would ensure that if the installation of utility connections and improvements would require temporary road or lane closures, there would be no significant transportation impact during construction. Accordingly, construction impacts would be less than significant, and no mitigation is required.

Operation. The SMWD relies almost entirely on imported water from the Metropolitan Water District of Southern California (MWD) and has a storage capacity of almost 430 million gallons of drinking water, representing one of the largest storage capacities in Orange County. The SMWD also has one of the most extensive recycled water programs in Orange County. This was achieved by innovative urban return projects and by operating three wastewater reclamation plants.[25]

As provided above, water service to the project site would be provided via connections to the existing water service line located in Camino Capistrano. As discussed under Threshold 4.13.2 below, the 2020 UWMP indicates that SMWD's water supplies are projected to meet full-service demands now and into the future year 2050 during normal years, single dry year, and multiple dry years. Accordingly, the proposed project would not substantially increase demand for water and would therefore not exceed the capacity of existing water treatment and conveyance facilities.[26] In addition, to ensure water and sewer usage reflects the latest available data, the Applicant will prepare a Water and Sewer Master Plan as part of the final design phase of the proposed project. The Water and Sewer Master Plan would be reviewed by the SMWD to ensure sufficient capacity exists. Accordingly, implementation of the proposed project would not require

[23] City of San Juan Capistrano. 1999. *San Juan Capistrano General Plan, Public Services and Utilities Element*. December 14.

[24] California Department of Transportation (Caltrans). 2014. *California Manual on Uniform Traffic Control Devices* (CA MUTCD). Revised April 1, 2025.

[25] Santa Margarita Water District. n.d. About Us. <https://www.smwd.com/316/About-Us> (accessed July 2025).

[26] Santa Margarita Water District. 2021. *2020 Urban Water Management Plan*. June.

or result in the relocation or construction of new or expanded water supply infrastructure and the proposed project would not require any new infrastructure, aside from the project-specific tie-ins and water pipelines to serve the proposed project, and all proposed water infrastructure would be limited to the project site. Therefore, operational impacts would be less than significant, and no mitigation is required.

Overall, the impact of the proposed project on water infrastructure would be **less than significant**. No mitigation is required.

Wastewater. Wastewater service would be provided by the City's Wastewater Management Division via an existing 8-inch sewer main that is connected to the Moulton Niguel Water District's 12-inch trunk line located adjacent to the OCTA owned rail line. The existing 8-inch sewer line was installed in 2015 to serve the Swanner House and restrooms at the project site when the City and MNWD entered into an agreement for the capacity discharge from the Swanner House and two future restrooms. As the SMWD annexed the City's water utilities system into its service area in 2021, prior to implementation of the proposed project, this agreement would be amended and the SMWD would be the sole wastewater service provider.

Construction. No significant increase in wastewater flows is anticipated as a result of construction activities within the project site as sanitary services during construction would be provided by portable toilet facilities, which transport waste off-site for treatment and disposal. Therefore, construction of the proposed project would not require the construction of new or expanded wastewater conveyance facilities. In addition, as previously discussed, the proposed project would be required to prepare and implement a construction worksite traffic control plan during construction activities, which would ensure that if the installation of utility connections and improvements would require temporary road or lane closures, there would be no significant transportation impact during construction. Therefore, impacts would be less than significant, and no mitigation would be required.

Operation. Following project implementation, the SMWD would collect and treat wastewater from the project site. Currently, SMWD collects and treats more than 10 mgd of wastewater from residential and commercial customers throughout its service area.[27] The SMWD utilizes three different treatment plants to appropriately treat the wastewater, including the Oso Creek Water Reclamation Plan, the Chiquita Water Reclamation Plan, and the J.B. Latham Treatment Plant. According to the SMWD, all wastewater flows from the City are treated at the J.B. Latham Treatment Plant in Dana Point, which is operated by the South Orange County Wastewater Authority (SOCWA).[28]

The total treatment capacity of J.B. Latham Treatment Plant is approximately 13 mgd consisting of preliminary treatment, primary treatment, secondary treatment, anaerobic digestion and solids dewatering. Based on the CalEEMod results, the proposed project is estimated to generate

[27] Santa Margarita Water District. n.d. Wastewater. <https://www.smwd.com/310/Wastewater> (accessed September 2025).

[28] Santa Margarita Water District. n.d. Wastewater. <https://www.smwd.com/310/Wastewater> (accessed September 2025).

approximately 11,614,130 gallons of wastewater per year (approximately 31,819 gallons per day).[29] According to this estimate, the proposed project would contribute 0.2 percent[30] of the current wastewater treatment rate of the J.B. Latham Treatment Plant. The J.B. Latham Treatment Plant would have adequate capacity to accommodate the wastewater flow from the proposed project and the existing sewer system has adequate capacity for the project. In addition, the Applicant would prepare a Water and Sewer Master Plan as part of project implementation, which would be reviewed by the SMWD to ensure sufficient capacity exists. Therefore, operational impacts would be less than significant, and no mitigation is required.

Overall, the impact of the proposed project on wastewater infrastructure would be **less than significant**. No mitigation is required.

Stormwater. As discussed in the WQMP and the Drainage Study, under existing conditions, the project site is covered by approximately 20,086 square feet (0.5 acre) of impervious surfaces (approximately 0.8 percent of the project site). The City also maintains storm drainage collection and conveyance facilities in the vicinity of the project site and regional flood control facilities in the area are maintained both by the City and the OCFCD. Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano with Oso Creek located to the west. In addition, an unnamed tributary to Trabuco Creek is located on the eastern portion of the project site, south of the existing barn and associated storage containers. The natural drainage at the project site is generally toward the southeast, conforming to the natural topography. Under existing conditions, stormwater at the project site either infiltrates at the project site or sheet flows south and southeast to discharge to Trabuco Creek.

Construction. Drainage patterns would be temporarily altered during grading and other construction activities. Specifically, the removal of vegetation can eliminate natural interception of stormwater runoff, resulting in increased flow rate, and grading activities can reshape the ground surface, which would direct stormwater runoff differently than existing conditions. As specified in Section 4.9, Hydrology and Water Quality, construction of the proposed project would disturb greater than 1 acre of soil would therefore be subject to the requirements of the Construction General Permit, as specified in **Regulatory Compliance Measure HYD-1**. As required by the Construction General Permit, the Construction Contractor would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement construction Best Management Practices (BMPs) detailed in the SWPPP during construction activities. Compliance with the requirements of the Construction General Permit, including implementation of construction BMPs, would ensure construction of the proposed project would not result in a substantial increase in the rate or amount of surface runoff, flow, and volume that would exceed the capacity of the adjacent stormwater drainage systems. Therefore, construction of the proposed project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects. In addition, the proposed project would be required to prepare

[29] In the absence of an official wastewater generation rate, wastewater can be reasonably assumed to be 90 percent of indoor water use. 12,904,589 of gallons of indoor water per year * 0.9 = 11,614,130 gallons of wastewater per year / 365 days per year = 31,819 gallons of wastewater per day.

[30] 31,819 gallons per day / 13 million gallons per day (mgd) = 0.0024

and implement a construction worksite traffic control plan during construction activities, which would ensure that if the installation of utility connections and improvements would require temporary road or lane closures, there would be no significant transportation impact during construction. Accordingly, the proposed project's construction impacts would be less than significant, and no mitigation is required.

Operation. As provided in the Drainage Study, implementation of the proposed project would increase the impervious surface area at the project site from approximately 0.5 acre (21,780 square feet) to approximately 4.7 acres (204,732 square feet). However, the proposed project would generally maintain the existing drainage pattern at the project site and would not change or add any runoff discharge points to Trabuco Creek. As discussed in greater detail in Section 4.9, Hydrology and Water Quality, with implementation of the proposed project, the project site would be divided into 17 drainage management areas (DMAs) to manage stormwater runoff from the entire project site. Generally, existing natural areas adjacent to Trabuco Creek would continue to drain into the creek via surface sheet flow and all developed areas of the project site (i.e. building footprints) would drain to bioretention areas. Overflows from the bioretention areas (i.e., flows greater than the design capture volume (DCV) and hydromodification requirement) within DMAs 1 through 6 and DMA 12 would be directed to separate infiltration basins, located throughout the project site and adjacent to the proposed bioretention areas, for infiltration. Overflows from DMAs 8, 9, 13, 14, 16, and 17 would be directed to the adjacent open space area to be infiltrated.

The bioretention areas would be designed to retain the DCV of stormwater runoff for the respective DMAs, pursuant to the Regional MS4 Permit, and would accommodate Regional MS4 Permit hydromodification requirements. Therefore, the proposed project's operational impacts would be less than significant, and no mitigation is required.

Overall, the impact of the proposed project on stormwater infrastructure would be **less than significant,** and no mitigation is required.

Electricity and Natural Gas. Electricity and natural gas would continue to be supplied by SDG&E and SoCalGas, respectively, via extensions from existing electrical and natural gas transmission lines in the vicinity of the project site.

Construction. Short-term construction activities would be limited to providing power to the staging area and portable construction equipment and would not substantially increase demand for electricity. The heavy equipment used for demolition and construction would be primarily powered by diesel fuel. Temporary electric power would be provided via existing utility boxes and lines within the vicinity of the project site. Given the limited nature of potential demand for electricity during construction and the availability of existing power lines adjacent to the project site, there would not be a need to construct new or alter existing electric transmission facilities. In addition, the proposed project would be required to prepare and implement a construction worksite traffic control plan during construction activities, which would ensure that if the installation of utility connections and improvements would require temporary road or lane closures, there would be no significant transportation impact during construction. Accordingly,

the proposed project's construction impacts related to electrical infrastructure would be less than significant, and no mitigation is required.

Project construction would also not result in demand for natural gas since construction activities/equipment would not require natural gas or connect existing adjacent natural gas facilities. Therefore, construction activities would not impact natural gas services and the proposed project would not require new or physically altered gas transmission facilities. The proposed project's construction impacts related to natural gas infrastructure would be less than significant, and no mitigation is required.

Operation. The proposed project's energy requirements (i.e., electricity, fuel consumption, and natural gas consumption) are further discussed in Section 4.5, Energy. As discussed in Section 4.5, the energy suppliers would have enough electricity and natural gas to adequately serve the proposed project once it is developed and operational. Accordingly, implementation of the proposed project would not require or result in the relocation or construction of new or expanded electricity or natural gas supply infrastructure, and impacts would be less than significant. No mitigation is required.

Overall, the impact of the proposed project on electrical and natural gas infrastructure would be **less than significant,** and no mitigation is required.

Telecommunications. The primary cable and telephone service providers available within the project site's vicinity (and, more generally, within San Juan Capistrano) are AT&T, Cox Communications, and Verizon. The proposed project would construct telecommunication facility extensions on the project site.

Construction. The construction and expansion of proposed telecommunication facilities would occur on site during the site preparation and earthwork phase and are not expected to impact any telephone, cable, or internet services offsite that serve the surrounding areas. In addition, as previously discussed, the proposed project would be required to prepare and implement a construction worksite traffic control plan during construction activities, which would ensure that if the installation of telecommunication facility extensions would require temporary road or lane closures, there would be no significant transportation impact during construction. Therefore, the proposed project's construction impacts related to telecommunication infrastructure would be less than significant, and no mitigation is required.

Operation. Although the proposed project would include telecommunication facility extensions, operation of the proposed project would not require or result in the relocation or construction of new or expanded telecommunication infrastructure as ongoing operational communication needs would be met through existing cellular and wireless networks, which are already available in the vicinity of the project site and are widely used for routine business, personal, and emergency communications. In addition, employees and visitors would be expected to primarily rely on personal mobile devices for voice, data, and internet access, consistent with current conditions. Therefore, implementation of the proposed project would not generate demand for new telecommunications facilities such as cell towers, antennas, or fiber-optic extensions

beyond existing service capacity. The proposed project's operational impacts would be less than significant, and no mitigation is required.

Overall, the impact of the proposed project on telecommunication infrastructure would be **less than significant,** and no mitigation is required.

Conclusion. Overall, because the proposed project would connect to existing utility services within or adjacent to the project site, the proposed project would not require or result in the relocation or construction 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, and this impact would be **less than significant**. No mitigation is required.

Threshold 4.13.2: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact.

Discussion of Effects: As discussed above, water service to the project site would be provided by SMWD. SMWD adopted its 2020 UWMP in June 2021. The UWMP provides a framework for long-term water planning and informs the public of SMWD's plans to ensure adequate water supplies for existing and future demands.[31] According to the 2020 UWMP, SMWD's water use in 2020 (potable, raw, and recycled) totaled 30,083 af, with single-family residential uses accounting for approximately 14,057 af (60 percent) of total potable water use.[32] SMWD's water use (potable, raw, and recycled) is projected to be 36,898 af in 2030, 40,853 af in 2035, 40,341 af in 2040, and 40,168 in 2045.[33] The 2020 UWMP indicates that SMWD's water supplies are projected to meet full-service demands now and into the future year 2050, including the projected full-service demands of its member agencies during normal years, single dry year, and multiple dry years.[34]

Based on the results of the CalEEMod modeling completed for this Draft EIR, the proposed project's estimated water usage would be approximately 53,238,482 gallons per year or 163 acre-feet per year (afy). Section 10912 of the California Water Code requires a Water Supply Assessment (WSA) for projects that would generate a water use demand equivalent to 500 dwelling units. The SMWD uses a planning factor of 450 gpd for single family dwelling units and 175 gpd for multifamily units.[35] Using these demand assumptions, 500 single family dwelling units would generate a water demand of approximately 82,125,000 gpy (252 afy) and 500 multifamily dwelling units would generate a water demand of approximately 31,937,500 gpy (98 afy). The proposed project's anticipated water

31 Santa Margarita Water District. 2021. *2020 Urban Water Management Plan*. June.
32 Santa Margarita Water District. 2021. *2020 Urban Water Management Plan,* Table 4-1 Retail: Use for Potable – 2020 ACTUAL and Table 4-3 Retail: Total Gross Water Use (Potable and Non-Potable (AF). June.
33 Santa Margarita Water District. 2021. *2020 Urban Water Management Plan,* Table 4-3 Retail: Total Gross Water Use (Potable and Non-Potable (AF). June.
34 Santa Margarita Water District. 2021. *2020 Urban Water Management Plan*. June.
35 Ibid.

demand would not exceed the water use demand equivalent for 500 single family dwelling units; however, it would exceed the water use demand equivalent for 500 multifamily dwelling units. However, it should be noted that the proposed project's anticipated water demand provided above was determined using default water demand estimates from CalEEMod for specific land uses. Because CalEEMod does not include land use types specific to horse barns, veterinary barns, amenities buildings, or agricultural and event barns, alternative land use types were selected to ensure conservative estimates. The proposed food service area and catering building were modeled using the *High Turnover (Sit-Down Restaurant)* category, which represents higher-intensity use relative to the proposed use. Similarly, *Medical Office Building* and *General Office Building* land use types were applied to represent the horse barn, veterinary barn, and agricultural event barn. These land use types are also more intensive than the agricultural and livestock-related structures included in the proposed project, which would have substantially lower demands and more limited occupancy. Use of these higher-intensity land use types therefore provides a conservative basis for estimating operational demand estimates and operation of the proposed project is anticipated to result if far less water demand than reported by CalEEMod. Therefore, a project-specific WSA is not required.

Furthermore, SMWD's projected water demand accounts for projected growth within the region as identified by the City's General Plan. As the proposed project is consistent with the General Plan designation for the project site, the proposed project's water demand has been accounted for in the City's water supply and demand estimates. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Impacts would be **less than significant**, and no mitigation is required.

Threshold 4.13.3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact.

Discussion of Effects: As discussed above, based on modeled flows, the proposed project would contribute approximately 0.2 percent of the current wastewater treatment rate at the J.B. Latham Treatment Plant. This increase in wastewater would be negligible compared to the treatment plant's current wastewater treatment rate. Therefore, the J.B. Latham Treatment Plant would have adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments. Impacts would be **less than significant**, and no mitigation is required.

Threshold 4.13.4: Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goal?

Less Than Significant Impact.

Discussion of Effects: Solid waste disposal services in the city are provided by CR&R. Solid waste in the city, including the project site, is disposed of at the Prima Deshecha Landfill, which is operated by OC Waste and Recycling. The Prima Deshecha Landfill, located at 32250 Avenida La Pata in San Juan Capistrano, opened in 1976 and features 1,530 total acres, with 697 acres for waste disposal. The landfill accepts a maximum of 4,000 tons of solid waste per day and as of September 1, 2023, had a remaining capacity of 128,800,000 cubic yards.[36] The maximum permitted capacity is 172,100,000 cubic yards and, according to OC Waste and Recycling, has a projected capacity to serve residents and businesses until approximately 2102.[37]

The project site is currently developed with the Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, which generate some solid waste under existing conditions. Construction and operation of the proposed project would increase the amount of solid waste generated at the project site over existing conditions. Based on the CalEEMod results for the proposed project, the proposed project is anticipated to generate an estimated 686 tons of solid waste per year (1.9 tons per day). This estimate would account for less than 0.01 percent of the maximum solid waste accepted per day by the Prima Deshecha Landfill. This increase in solid waste would be negligible compared to the landfill's maximum allowable daily capacity. Therefore, the proposed project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs. Therefore, implementation of the proposed project would have a **less than significant** impact related to solid waste, and no mitigation is required.

4.13.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for utilities and service systems. The cumulative impact area for utilities and service systems related to the proposed project is the City of San Juan Capistrano, including the cumulative projects listed in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures.

Implementation of the proposed project would not require the construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities beyond the improvements detailed above. As discussed above, all project-specific impacts related to utilities and service systems would be less than significant with compliance with existing laws, ordinances, regulations, and standards. In addition, SMWD would have sufficient water and wastewater service available to serve the proposed project and the Applicant would prepare a Water and Sewer Master Plan as part of project implementation, which would be reviewed by the SMWD to ensure sufficient infrastructure capacity exists.

In addition, SMWD's 2020 UWMP indicates that SMWD's water supplies are projected to meet full-service demands now and into the future, including the projected full-service demands of its

[36] California Department of Resources Recycling and Recovery (CalRecycle). 2025. Solid Waste Information System Facility Detail. <https://calrecycle.ca.gov/SWFacilities/> (accessed) January 31, 2025).

[37] California Department of Resources Recycling and Recovery (CalRecycle). 2025. Solid Waste Information System Facility Detail. <https://calrecycle.ca.gov/SWFacilities/> (accessed) January 31, 2025).

member agencies during normal years, single dry year, and multiple dry years.[38] As the UWMP anticipates growth in population and development through 2045, and because sufficient supplies of water have been identified to serve this forecast growth, it is reasonable that cumulative development consistent with the growth anticipated in the UWMP would not lead to a cumulatively considerable impact on water supply. As with the proposed project, cumulative development would connect to SMWD's water supply and distribution system per the conditions and requirements established by the City. Based on the results of the CalEEMod modeling completed for this Draft EIR, the proposed project's estimated water usage would be approximately 53,238,482 gallons per year or 163 afy, representing a minimal 0.4 percent of the total water usage for SMWD in 2030, 2035, 2040, and 2045. In addition, the proposed project is consistent with the General Plan designation for the project site, and the proposed project's water demand has been accounted for in the City's water supply and demand estimates. Therefore, cumulative impacts associated with water supply or infrastructure facilities within the city would be less than significant, and mitigation is not required.

As discussed above, the proposed project is estimated to generate approximately 11,614,130 gallons of wastewater per year (approximately 31,819 gallons per day), representing a negligible 0.2 percent contribution to the current wastewater treatment rate of the J.B. Latham Treatment Plant. Accordingly, the proposed project would be adequately served by existing wastewater disposal and conveyance infrastructure, and cumulative impacts with respect to wastewater treatment capacity would be less than significant. As with the proposed project, cumulative development would connect to the City's and SMWD's wastewater conveyance and treatment system per the conditions and requirements established by the City. Therefore, cumulative impacts associated with wastewater facilities would be considered less than significant, and mitigation is not required.

As discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR, cumulative development within the watershed will result in an increase in impervious surfaces in addition to changes in land use and associated pollutant runoff characteristics. Increased impervious surfaces are likely to alter existing hydrology and increase potential pollutant loads. However, all cumulative development would be required to comply with the requirements of the NPDES permit program. Continued growth is anticipated to occur in the City and surrounding areas, and all new development and significant redevelopment will be required to minimize its individual impacts to stormwater drainage and pollutant transport through implementation of Best Management Practices (BMPs). In addition, the proposed stormwater drainage system for the proposed project would be designed so that peak flows from post-development runoff would be captured by operational BMPs, including bioretention areas and infiltration basins. The bioretention areas would be designed to retain the DCV of stormwater runoff for the respective DMAs, pursuant to the Regional MS4 Permit. Similar requirements would be placed on all other development in the City. Therefore, the proposed project would not result in a significant contribution to any cumulatively considerable impacts related to the need for new stormwater drainage facilities. Consequently, cumulative impacts associated with stormwater drainage would be less than significant, and mitigation is not required.

As discussed above, the proposed project is anticipated to generate an estimated 686 tons of solid waste per year (1.9 tons per day), representing less than 0.01 percent of the maximum solid waste accepted per day by the Prima Deshecha Landfill. Therefore, the proposed project would be

[38] Santa Margarita Water District. 2021. *2020 Urban Water Management Plan.* June.

adequately served by existing solid waste disposal and conveyance infrastructure. In addition, the proposed project would comply with AB 1327, AB 939, AB 341, and all other applicable local, State, and federal solid waste disposal standards. Therefore, the proposed project would not make a significant contribution to any cumulatively considerable impacts related to the need for new solid waste facilities. Past, present, and future projects, including the cumulative projects listed in **Table 4.A: Cumulative Projects,** would also be required to adhere to these regulations. Therefore, cumulative impacts associated with solid waste would be **less than significant**, and mitigation is not required.

In addition, as discussed in Section 4.5, Energy, of this Draft EIR, although the proposed project would result in an increase in demand for electricity, this increase would not require SDG&E to expand or construct infrastructure that could cause substantial environmental impacts. The total electricity consumption in the SDG&E service area in 2024 was 16,786 GWh. By 2030, consumption is anticipated to increase by 12,000 GWh for the low-demand scenario and by 22,000 GWh for the high-demand scenario.[39] While this forecast represents a large increase in electricity consumption, the proposed project's share of cumulative consumption would be negligible. In addition, the proposed project, in combination with cumulative development, is well within SDG&E's system-wide net annual increase in electricity supplies over the 2018 to 2030 period, and there are sufficient planned electricity supplies in the region for estimated net increases in energy demands.

Similarly, as discussed in Section 4.5, additional natural gas infrastructure is not anticipated due to cumulative development. The total natural gas consumption in the SoCalGas service area in 2024 was 4,959 million therms. Between 2018 and 2030, total natural gas consumption in the SoCalGas service area is forecast to remain steady for the low- and mid-demand scenarios and to increase by approximately 650 million therms in the high-demand scenario due to intense energy efficiency efforts.[40] As mentioned in the preceding sections, natural gas consumption associated with the proposed project would be limited to the commercial kitchen. Therefore, the proposed project's share of cumulative consumption of natural gas in the SoCalGas service area would be negligible. It is anticipated that SoCalGas would be able to meet the natural gas demand of cumulative development without additional facilities. In addition, the SoCalGas demand forecast includes the growth contemplated by the proposed project and the other cumulative development within their respective service areas. Increased energy efficiency to comply with building energy efficiency standards would reduce energy consumption on a per-square-foot basis. Furthermore, utility companies are required to increase their renewable energy sources to meet the Renewable Portfolio Standards mandate of 60 percent renewable supplies by 2030, and SoCalGas plans to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

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39 California Energy Commission (CEC). 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed February 2026).

40 California Energy Commission (CEC). 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed February 2026).

Because utility interconnections, including telecommunications, would occur during preparation and earthwork phases, impacts associated with the expansion of telecommunications facilities are already considered in the overall analytical framework of this Draft EIR. Therefore, cumulative impacts associated with telecommunications for the proposed project would be less than significant, and mitigation is not required.

Each discretionary project in the city would be subject to project-specific review under CEQA, existing laws, ordinances, regulations, mitigation requirements, and design review, as applicable, including obtaining will-serve letters from the utility purveyors, as required, consulting with SMWD staff to establish development design conditions, and payment of fees, as applicable. As discussed above, all proposed impacts to utilities and service systems would be less than significant in consideration of compliance with existing laws, ordinances, regulations, and standards. Impacts are generally localized and would occur at different times in keeping with the project phasing and would therefore avoid significant cumulative impacts from multiple overlapping developments. Therefore, the cumulative impacts of the proposed project and the cumulative projects related to utilities and service systems would be **less than cumulatively considerable**.

4.13.8 Level of Significance Prior to Mitigation

There would be no potentially significant impacts related to utilities and service systems with implementation of the proposed project.

4.13.9 Regulatory Compliance Measures and Mitigation Measures

4.13.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.13.9.2 Mitigation Measures

No mitigation measures are required.

4.13.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to utilities and service systems, and no mitigation is required.

4.14 WILDFIRE

This section discusses potential wildland fire hazards associated with the Legacy Ranch Project (proposed project). This section incorporates data from the Safety Element of the City of San Juan Capistrano (City),[1] the Fire Behavior Analysis Report prepared for the proposed project (**Appendix O**), a review of existing resources, technical data, and applicable laws, regulations, and guidelines.

4.14.1 Scoping Process

The City of San Juan Capistrano (City) received no comments pertaining to potential wildfire impacts during the scoping period for this Draft Environmental Impact Report (EIR). In addition, no comments pertaining to wildfire were submitted during the public scoping meeting held on November 19, 2025. Scoping comments are provided in **Appendix A** to this Draft EIR.

4.14.2 Existing Environmental Setting

Fire environments are dynamic systems and include many types of environmental factors and site characteristics. Fire can occur in any environment where conditions are conducive to ignition and fire movement. Areas of naturally vegetated open space typically provide conditions that may be favorable to wildfire spread. The three major components of the fire environment are topography, climate, and vegetation (fuels). The state of each of these components and their interactions with each other determines the potential characteristics and behavior of a fire at any given moment.

A wildfire is a nonstructural fire that occurs in vegetative fuels. Wildfire generally does not include prescribed or controlled fires set by firefighters to manage fuel loads in fire-prone landscapes. Wildfire ignition sources may include lightning, improperly managed campfires, cigarettes, arson, sparks from automobiles, lawnmowers, and maintenance equipment, and other sources. It is important to note that wildland fire may transition to urban fire if structures are receptive to ignition. Structure ignition depends on a variety of factors and can be prevented through a layered system of protective features including fire-resistive landscapes adjacent to structure(s), application of known ignition-resistive materials and methods, and suitable infrastructure for firefighting purposes. Understanding the existing wildland vegetation and urban fuel conditions on and adjacent to the site is necessary to understand the potential for fire within and around the project site.

The State has designated areas prone to wildfire as State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs). Lands where the California Department of Forestry and Fire Protection (CAL FIRE) is responsible for wildland fire protection are generally located in unincorporated areas and are classified as SRAs. Where local fire protection agencies (e.g., Orange County Fire Authority [OCFA]) are responsible for wildfire protection, the lands are classified as Local Responsibility Areas (LRAs). Lands prone to wildfire are classified as Fire Hazard Severity Zones (FHSZs), including Moderate, High, and Very High FHSZs. FHSZs have been developed using a model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior including fire

[1] City of San Juan Capistrano. 2022. General Plan Update Safety Element. February 1. Website: https://www.sanjuancapistrano.org/DocumentCenter/View/1081/General-Plan---Safety-Element-PDF (accessed June 10, 2026).

history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area. CAL FIRE currently identifies the project site as an LRA.[2]

The City's General Plan Safety Element (2022) identifies the project site as being located outside a wildfire hazard area. However, the 2025 CAL FIRE fire hazard map identifies the western half of the project site as being within both the High Fire Hazard Severity Zone and Moderate Fire Hazard Severity Zone. The High Fire Hazard Severity Zone dominates the western half of the project site and extends into the west into residential areas of the city of Laguna Niguel. The Moderate Fire Hazard Severity Zone borders the High Fire Hazard Severity Zone to the east where it extends onto the project site.[3] This area largely consists of undeveloped open space within the NWOS plan area with open space, agricultural, and residential uses to the west, beyond the NWOS boundary.

The following sections discuss the characteristics of the Project site, as well as the site characteristics, local climate, and fire history within and immediately surrounding the site. The intent of evaluating conditions at this macro-scale is to provide a better understanding of the regional fire environment, which is not constrained by property boundary delineations.

4.14.2.1 Climate and Topography

The City of San Juan Capistrano is located in southern Orange County on varied topography including alluvial floodplains, rolling hills, and foothill terrain. According to the *Geotechnical Investigation and Preliminary Design Recommendations Report, San Juan Capistrano Legacy Ranch Northwest Open Space, San Juan Capistrano, California* (Geotechnical Investigation)[4] (**Appendix H**) prepared for the proposed project, the overall site is relatively flat except for the banks leading down to Trabuco Creek which are very steep. Elevations onsite range from 154 feet above mean sea level (amsl) in Trabuco Creek on the south side to 208 feet amsl on the north side of the project site.

The City is situated within an area typified by a Mediterranean climate, which is characterized by mild winters and dry, warm summers. Wildfire is considered a major hazard in Orange County, and risk is especially high during dry winters. Risk is magnified due to hot, dry, and windy weather and is especially dangerous during Santa Ana wind events.[5] Although Santa Ana wind events can occur at any time of the year, they generally occur during the autumn months. Santa Ana winds may gust up to 75 miles per hour (mph) or higher.

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2 California Department of Forestry and Fire Protection (CAL FIRE). 2025a. Fire Hazard Severity Zones. March 24. Website: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones (accessed June 10, 2026).

3 California Department of Forestry and Fire Protection (CAL FIRE). 2025. Fire Hazard Severity Zones. March 24. (accessed June 10).

4 GMU Engineers & Geologists. 2025. *Geotechnical Investigation and Preliminary Design Recommendations Report, San Juan Capistrano Legacy Ranch Northwest Open Space, San Juan Capistrano, California*. October 9, 2025.

5 City of San Juan Capistrano. 2022. General Plan Update Safety Element. February 1. Website: https://www.sanjuancapistrano.org/DocumentCenter/View/1081/General-Plan---Safety-Element-PDF (accessed June 10, 2026).

4.14.2.2 Fuels Vegetation

The natural vegetation in San Juan Capistrano is highly prone to wildland fire. As described in Section 3.0, Project Description, the project site is currently developed with the Swanner House, the Dr. Joe Cortese Dog Park, the Putuidem Village, a barn and various storage containers, and an existing pump house. Vegetation on the project site includes grasses, shrubs, and mature trees and is densely vegetated with a variety of riparian species in the vicinity of Trabuco Creek.

4.14.2.3 Fire History

Fire history is an important component in analyzing wildfire susceptibility. Fire history data provides valuable information regarding fire spread, fire frequency, most vulnerable areas, and significant ignition sources, among others. In turn, this understanding of why fires occur in an area and how they typically spread can then be used for pre-planning and designing defensible communities.

As described in the City's General Plan Safety Element, the City of San Juan Capistrano is subject to wildland and urban fires, and has historically witnessed or been threatened by several fires, including the 1985 Stewart Fire, which burned 2,500 acres in the City, the 1988 Ortega Fire, which burned 2,384 acres, and the 1889 Santiago Canyon Fire, which burned south of El Toro in the coastal foothills and in the mountains.[6] Recent fires include the 2016 San Juan Fire, which burned 70.31 acres in the city of Laguna Niguel, immediately west of the project site.[7]

Fire history on the project site and in the surrounding area was determined by referencing the Fire and Resources Assessment Program (FRAP) database. These data provide a summary of recorded fires and can be used to show whether large fires have occurred in the project site, which is one indication of the likelihood of fires occurring at the project site in the future. According to the database, there have been no recorded fires that have burned onto any portion of the project site.[8]

4.14.3 Regulatory Setting

The following describes the federal, State and local regulations and policies related to wildfire that are relevant to the proposed project.

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6 City of San Juan Capistrano. 2022. General Plan Update Safety Element. February 1. Website: https://www.sanjuancapistrano.org/DocumentCenter/View/1081/General-Plan---Safety-Element-PDF (accessed June 10, 2026).

7 California Department of Forestry and Fire Protection (CAL FIRE), California State Geoportal, California Historical Wildland Fire Perimeters Exploratory Map. Website: https://gis.data.ca.gov/maps/CALFIRE-Forestry::california-historical-wildland-fire-perimeters-exploratory-map/explore?location=33.526701%2C-117.671146%2C16&path= (Accessed June 21, 2026).

8 California Department of Forestry and Fire Protection (CAL FIRE). 2022. *Fire and Resource Assessment Program. California Fire Perimeters 2022.* Website: https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program/fire-perimeters (accessed June 10, 2026).

4.14.3.1 Federal Policies and Regulations

National Fire Protection Association (NFPA) Code 1710. Code 1710 of the NFPA provides the minimum requirements for the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire departments.

National Incident Management System (NIMS). The NIMS provides a systematic, proactive approach to guide government agencies, nongovernmental organizations, and the private sector to work together to prevent, report, recover from, and mitigate the effects of fire incidents, regardless of cause, size, location, or complexity, to reduce the loss of life and property harm. The City maintains an Emergency Management Program that includes participation in NIMS. This helps the City prepare for and respond to potential incidents and hazard scenarios.

4.14.3.2 State Regulations

CAL FIRE and Resources Assessment Program. CAL FIRE publishes maps that predict wildfire threat for each county in the State. LRAs, SRAs, and Federal Responsibility Areas (FRAs) are classified as either VHFHSZ or non-VHFHSZ based on factors including fuel availability, topography, fire history, and climate. CAL FIRE produced the CAL FIRE Strategic Plan 2024, which guides State fire policy.

California Fire Code (CFC). The CFC contains regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations, distribution, and spacing. Fire safety regulations address building access and safety, building materials and types of construction and clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

CAL FIRE Strategic Fire Plan 2024. This statewide plan is a strategic document that guides fire policy for much of California and which includes goals for maintaining and improving CAL FIRE's performance and objectives to meet in support of those goals. The plan is aimed at reducing wildfire risk through pre-fire mitigation efforts tailored to local areas through assessments of fuels, hazards, and risks.

California State Hazard Mitigation Plan (SHMP). The purpose of the SHMP is to significantly reduce deaths, injuries, and other losses attributed to natural and human-caused hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, State, and federal agencies as well as the private sector.

California Government Code. California Government Code Section 51175 defines VHFHSZs and designates lands considered by the State to be a very high fire hazard. California Government Code Section 51189 directs the Office of the State Fire Marshal to create building standards for wildland fire resistance. The Government Code includes measures that increase the likelihood of a structure withstanding intrusion by fire (e.g., building design and construction requirements that use fire-resistant building materials) and provides protection of structure projections (e.g., porches, decks, balconies, and eaves) and structure openings (e.g., attics, eave vents, and windows).

California Public Resources Code (PRC). The State's Fire Safety Regulations are set forth in PRC Section 4290 et seq., which includes the establishment of SRAs. PRC Section 4291 sets forth

defensible space requirements, which are applicable to anyone that "… owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush covered lands, grass-covered lands, or land that is covered with flammable material" (PRC § 4291(a)).

Assembly Bill 337. Per Assembly Bill (AB) 337, local fire prevention authorities and CAL FIRE are required to identify VHFHSZs in LRAs. Standards related to brush clearance and the use of fire-resistant materials in FHSZs are also established.

California Code of Regulations (CCR), Title 8 (Industrial Relations). In accordance with CCR Title 8 Sections 1270 and 6773 (Fire Prevention, and Fire Protection and Fire Equipment), the California Occupational Safety and Health Administration (Cal/OSHA) establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

CCR Title 14 (Natural Resources). Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

CCR Title 19 (Public Safety). Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

CCR Title 24 (California Building Standards Code). The CFC is set forth in Part 9 of the Building Standards Code. The CFC, which is pre-assembled with the International Fire Code (IFC) by the International Code Council (ICC), contains fire-safety building standards referenced in other parts of Title 24.

California Health and Safety Code (HSC) Section 13000 et seq. State fire regulations are set forth in HSC § 13000 et seq. which is divided into "Fires and Fire Protection" and "Buildings Used by the Public." The regulations provide for the enforcement of the CBC and mandate the abatement of fire hazards. The HSC establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

HSC Division 12.5 (Buildings Used by the Public). Division 12.5 of the HSC establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and post-secondary buildings.

California Residential Code (CRC) Section R337. Section R337 establishes minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within an SRA or any Wildland Urban Interface (WUI) Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses. This section regulates materials and construction methods for exteriors susceptible to wildfire exposure.

CBC, Chapter 7A. Chapter 7A applies to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a WUI Fire Area. This section of the

CBC establishes minimum standards for features such as fire retardant-treated wood and wood shingles, surface treatment protection, ignition-resistant construction, roof coverings and gutters, vents, exterior walls and coverings, exterior porch ceilings, underfloor protection, exterior windows, skylights, and doors, decking, and accessory structures.

Executive Order (EO) N-04-19. On January 9, 2019, Governor Newsom announced Executive Order (EO) N-04-19, which requires State agencies to identify innovative and sustainable solutions to address the State's wildfire crisis, such as upgraded fire detection technology.

EO N-05-19. On January 9, 2019, Governor Newsom also announced EO N-05-19, which requires CAL FIRE and other State agencies to compile policy and regulatory recommendations concerning wildfire mitigation, emphasizing environmental sustainability and public health. EO N-05-19 requires the incorporation of socioeconomic analysis when conducting risk management of wildfires and mandates that agencies identify geographic areas with populations that are more vulnerable to the impacts of wildfires.

EO N-18-25. In February 2025, Governor Newsom issued EO N-18-25, which is intended to strengthen wildfire resilience in urban and suburban areas by enhancing "Zone 0" defensible space and improving hazard mapping and preparedness systems. EO N-18-25 also initiated the development of a comprehensive, statewide wildfire resilience framework through an interagency, stakeholder-led process. Specifically, EO N-18-25 directs the State Board of Forestry and Fire Protection, in consultation with the State Fire Marshal, to finalize formal regulations establishing an ember-resistant zone within 5 feet of structures and instructs the Office of the State Fire Marshal to release updated FHSZ maps for areas within an LRA, which was completed in early 2025.

4.14.3.3 Regional Regulations

OCFA Fire Master Plans for Commercial & Residential Development, Guideline B-09. Guideline B-09 of the 2023 Fire Master Plans for Commercial & Residential Development establishes general guidelines pertaining to the installation and maintenance of fire department access roadways, access walkways to and around buildings, and hydrant quantity and placement as required by the 2022 CFC and CBC, and as amended by local ordinance. The proper installation and maintenance of fire access roadways, the proper siting of hydrants, adequate water supply, and proper access to structures are essential in enabling effective emergency response and firefighting operations.

County of Orange and OCFA Local Hazard Mitigation Plan (2021). This plan identifies risks and vulnerabilities, establishes hazard mitigation strategies, describes emergency organization, task assignments, and general procedures, and provides for coordination of response in the event of an emergency. This plan does not identify specific emergency response or evacuation routes.

4.14.3.4 Local Regulations

City of San Juan Capistrano Municipal Code. The California Fire Code has been adopted by the City as Chapter 8-10, California Fire Code, of the City's Municipal Code. The California Building Code (2025), with amendments, is incorporated into Chapter 2, Sections 8-2.01 and 8-2.02 of the City's Municipal Code.

City of San Juan Capistrano General Plan. The Safety Element of the San Juan Capistrano General Plan identifies the following goals, policies, and actions related to wildfire and fire protection services:

- **Safety Goal 1:** Reduce the risk to the community from hazards related to geologic conditions, seismic activity, wildfires, flooding, and climate change
    - **Wildfire Policy 1.1:** Ensure that the City standards for fire protection for new development in Very High Fire Hazard Severity Zones meet or exceed the statewide minimums.
    - **Wildfire Policy 1.2:** Minimize the approval of new residential subdivision developments in Very High Fire Hazard Severity Zones when feasible.
    - **Wildfire Policy 1.3:** Continue to enforce and, as needed, increase the weed abatement and Arundo removal program on an annual basis.
    - **Wildfire Policy 1.4:** Require property owners to incorporate fire-safe and erosion-safe design during new development or major renovations (development over a two-year period of more than 33% of existing square footage or 2,000 s.f. resulting in the building exceeding 5,000 square feet.) and receive contracted emergency service agency's approval prior to permit issuance.
    - **Wildfire Policy 1.5:** Coordinate with local contracted fire emergency service agency to evaluate the required fire safe design to be incorporated during rebuilding effort after a major disaster.
    - **Wildfire Policy 1.6:** Reduce the risk of wildfire hazards by requiring fuel modification for landscaping and defensible space for development located in areas of high wildfire risk.
    - **Wildfire Policy 1.7:** Cooperate and coordinate with the Orange County Fire Authority and California Water Service to ensure that fire hydrant placement, water pressure, and availability of fire suppression equipment are adequate for firefighting purposes.
    - **Wildfire Policy 1.8:** Cooperate with the California Water Service to make sure that present and future water supply needs are met adequately.
    - **Wildfire Policy 1.9:** Reduce the risk of erosion and mudslides following wildfires by developing a revegetation/erosion control strategy.
    - **Wildfire Policy1.10:** Coordinate with Caltrans, Orange County, local contracted emergency service agencies, and City Public Works to maintain defensible space along public and private roads.

- **Wildfire Policy 1.11:** Coordinate with Cal Fire, and local contracted fire emergency service agency to maintain and create fuel breaks in and around the City.

- **Wildfire Policy 1.12:** Continue to coordinate with the local contracted fire emergency service agency to determine future emergency needs and required training.

4.14.4 Methodology

The potential wildfire-related impacts from project-related activities were evaluated qualitatively based on information provided in documents and maps obtained from the City's General Plan, the Orange County Fire Authority's (OCFA) Local Hazard Mitigation Plan, and CAL FIRE.

4.14.5 Thresholds of Significance

The thresholds for wildfire impacts used in this analysis are consistent with Appendix G of the State Guidelines for the Implementation of CEQA of 1970 (*State CEQA Guidelines*). The proposed project may be deemed to have a significant impact on wildfire if it is located in or near state responsibility areas or lands classified as very high fire hazard severity zones and would:

Threshold 4.14.1: Substantially impair an adopted emergency response plan or emergency evacuation plan;

Threshold 4.14.2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;

Threshold 4.14.3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water resources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment; or

Threshold 4.14.4: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

4.14.6 Project Impacts

Threshold 4.14.1: Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact.

Discussion of Effects: The City's disaster and evacuation routes are depicted in Figure 2-12 in the Safety Element of the City's General Plan. As shown in Figure 2-12, evacuation routes in the vicinity

of the project site include Camino Capistrano and I-5.[9] The project site directly abuts Camino Capistrano and would have direct access to this evacuation route. The following discusses potential impacts to emergency response or evacuation plans associated with project construction and operation.

Construction. Vehicular access to the project site would be provided via two ingress/egress driveways from Camino Capistrano, including the existing access driveway south of the Swanner House and one proposed driveway that would provide access to the Community Building Core parking area. Drive aisles would facilitate traffic circulation throughout the project site and no roadway modifications are proposed for Camino Capistrano or I-5. The proposed project would include development of connections to existing utility infrastructure within public roadways in the surrounding area. Construction of these roadway and utility improvements may require road closures or detours in the immediate vicinity of the project site, including on Camino Capistrano, a designated emergency evacuation route. The contractor would be required to implement a construction worksite traffic control plan that complies with applicable engineering standards outlined in the California Manual of Uniform Traffic Control Devices,[10] ensuring that construction activities, which may temporarily restrict vehicular traffic, would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Overall, all large construction vehicles entering and exiting the site would be guided by the use of personnel using signs and flags to direct traffic. Therefore, construction activities would not impact vehicle flow and the proposed project would not physically impair or interfere with emergency response or evacuation in the project vicinity. Construction of the proposed project would have a **less than significant** impact associated with the substantial impairment of an adopted emergency response plan or emergency evacuation plan, and no mitigation is required.

Operation. Because all circulation improvements would be constructed in accordance with applicable standards associated with vehicular access, resulting in the provision of adequate emergency access and evacuation, operation of the proposed project would not interfere with emergency access to and from the project site. The design of the proposed project would be submitted for review and approval by the OCFA, which provides fire and emergency medical services in the city, and the Orange County Sheriff's Department, which provides primary law enforcement services for the city, prior to the issuance of building permits in order to ensure development would not interfere with the City's Emergency Management framework. In addition, because the proposed project would not result in any permanent alterations to Camino Capistrano or I-5, the proposed project would not disrupt evacuation via Camino Capistrano and I-5 in the event of an emergency and adherence to the emergency access measures required by the City would ensure that potential

9 City of San Juan Capistrano. 2022. General Plan Update Safety Element. February 1. Website: https://www.sanjuancapistrano.org/DocumentCenter/View/1081/General-Plan---Safety-Element-PDF (accessed June 10, 2026).

10 California Department of Transportation (Caltrans). 2014. *California Manual of Uniform Traffic Control Devices,* Federal Highway Administration's MUTCD 2009 Edition, including Revision 1, 2, & 3 as amended for use in California, 14th Editions, Revision 9.

impacts related to physical interference with an adopted emergency response plan or emergency evacuation plan would be **less than significant**, and no mitigation is required.

Threshold 4.14.2: Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact.

Discussion of Effects: Topography influences the movement of air, thereby directing a fire course. Wind events magnify the risks of wildfire and have the potential to expose inhabitants of the City to elevated pollutant concentrations. Winds may push wildfire smoke into the area of the proposed project; however, these conditions would be temporary and if conditions warranted, the local air quality control district would warn residents of potential impacts due to wildfire smoke.

The proposed project would be required to adhere to applicable City building and fire codes as part of project development. In addition, the proposed project would be developed consistent with General Plan's wildfire policies, including Safety Element Policy 1.6 requiring reducing the risk of wildfire hazards by requiring fuel modification for landscaping and defensible space in areas most at risk of wildfire. In furtherance of consistency with these policies, a Fire Behavior Analysis Report was prepared for the proposed project, assessing the wildland fire related risks within and adjacent to the project site. The purpose of this exercise was to establish the appropriate criteria to determine the locations and size of fuel modification zones, defensible space implementation, and protection measures which would be necessary to provide a level of protection which is equal to or greater than the prescriptive requirements of the wildland interface codes, ordinances, standards, and guidelines which govern development of the project site. The analysis included a discussion of weather inputs and wind patterns, fuels, and slope. The results determined that no thinning zones would be required; however, a distance of 100 feet from the riparian area to the development area is needed to counter the worst-case scenario radiant heat that could be generated from a wildfire and to prevent direct flame contact. The design criteria included in the Fire Behavior Analysis Report indicated the need to include a method for stopping fire progression where the riparian corridor interfaces with the development area. These methods could be either a mineral earth (e.g., decomposed granite) path, a radiant heat wall, or some other method of stopping fire progression. As development of structures associated with the proposed project would be set back from the existing conservation covenant encompassing Trabuco Creek and both its banks by an approximately 100-foot buffer, the proposed project would include a mineral earth path on either side of the riparian corridor as the method for stopping fire progression. Accordingly, the proposed project would incorporate design features that would reduce wildfire risk and limit exposure of people on the project site to the uncontrolled spread of a wildfire.

The proposed project would also be designed in accordance with current California Fire Code Standards, which include requirements governing road widths, access points, and construction fire suppression techniques. By complying with these regulations, implementation of the proposed project would reduce wildfire risks, reduce potential wildfire associated pollutant concentrations, and help prevent the uncontrolled spread of a wildfire. Impacts would be **less than significant**, and no mitigation is required.

Threshold 4.14.3: Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact.

Discussion of Effects: As discussed in Chapter 3.0, Project Description, future development on the project site would also include various utility and infrastructure improvements. The project site is located in an area of the city that is already served by existing water, wastewater, power, and roadway infrastructure, and the proposed project would connect to the existing infrastructure networks in the surrounding area. The proposed project would be required to adhere to applicable City building and fire codes, and would be designed in accordance with current California Fire Code Standards. In addition, the design of the proposed project would be submitted for review and approval by the OCFA. Development of structures included in the proposed project would be set back from the existing conservation covenant encompassing Trabuco Creek and both its banks by an approximately 100-foot buffer and the proposed project would include a mineral earth path developed adjacent to the riparian corridor, consistent with the recommendation of the Fire Behavior Analysis Report. Accordingly, the installation of all project-related utility improvements would be implemented in accordance with the current California Building Code, California Fire Code, and applicable local ordinances, impacts related to the installation or maintenance of infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment would be **less than significant**, and no mitigation is required.

Threshold 4.14.4: Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?

Less Than Significant Impact.

Discussion of Effects:

Landslides. Landslides, including mudflows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking but can also occur as a result of erosion and downslope runoff caused by rain following a fire. According to the California Department of Conservation, the project site is not within an area identified as having potential for landslides and the project site, with the exception of the Trabuco Creek corridor, is relatively flat.[11] While hillsides located to the west of the project site could potentially cause landslides, particularly in the event of post wildfire instability, the project site is of sufficient distance to prevent exposure to people on site to significant risk. Accordingly, the proposed project would not expose people or structures to significant risks, including downslope

[11] California Department of Conservation (DOC). n.d.-a. California Geological Survey, Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/ (accessed June 10, 2026).

landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be **less than significant**, and no mitigation is required.

Flooding. While hillsides located to the west of the project site could generate substantial runoff leading to flooding in the event of post wildfire instability caused by burned vegetation, the project site is of sufficient distance to prevent exposure to people on site to significant risk. In addition, per the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) viewer, the majority of the project site is not located within a flood zone. This means that there is a very low likelihood of flooding at the project site.[12] Therefore, the proposed project would not have the potential to expose people or structures to downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability or drainage changes. Impacts would be **less than significant**, and no mitigation is required.

4.14.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for wildfire. The cumulative impact area for wildfire related to the proposed project is the City of San Juan Capistrano, including the cumulative projects listed in **Table 4.A: Cumulative Projects**, in Chapter 4.0, Setting, Impacts, and Mitigation Measures.

As detailed in this section, the proposed project would result in less than significant impacts related to wildfire. While several of the related projects listed in **Table 4.A: Cumulative Projects** would occur in the vicinity of the project site**,** all discretionary private development and public works projects within the cumulative study area would be required to comply with CEQA. In this way, potential impacts related to wildfire would be evaluated and mitigated by each individual project.

Additionally, all discretionary private development and public works projects within the cumulative study area would be required to adhere to City, County, State, and federal regulations designed to reduce and/or avoid impacts related to wildfire including flooding hazards and landslides after a wildfire event. Since all projects within the cumulative study area would be required to implement appropriate mitigation measures and adhere to applicable regulations, implementation of the proposed project, when evaluated in combination with the development of projects listed in **Table 4.A**, would not contribute to a cumulatively considerable impact related to wildfire. Therefore, there would be no cumulatively significant impact related to wildfire, and no mitigation is required.

4.14.8 Level of Significance Prior to Mitigation

There would be no potentially significant impacts related to wildfire with implementation of the proposed project.

[12] Federal Emergency Management Agency (FEMA). 2009. FEMA's National Flood Hazard Layer (NFHL) Viewer. December. Website: https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd (accessed June 10, 2026).

4.14.9 Regulatory Compliance Measures and Mitigation Measures

4.14.9.1 Regulatory Compliance Measures

No regulatory compliance measures are applicable to the proposed project.

4.14.9.2 Mitigation Measures

No mitigation measures are required.

4.14.10 Level of Significance after Mitigation

The proposed project would not result in significant impacts related to wildfire, and no mitigation is required.

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5.0 ALTERNATIVES

5.1 INTRODUCTION

The *State CEQA Guidelines* require that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant impacts of the project, and evaluate the comparative merits of the alternatives" (*State CEQA Guidelines* Section 15126.6). This chapter identifies potential alternatives to the Specific Plan 3.0 Buildout Project (proposed project), evaluates the potential impacts of each alternative, and compares the potential impacts of each alternative against the proposed project's impacts, as required by CEQA.

Section 15126.6 of the *State CEQA Guidelines* sets forth the intent and requirements for the alternatives analysis in an EIR, including the following provisions:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly (15126.6[b]). The range of potential alternatives to the proposed project 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. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the 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: (1) failure to meet most of the basic project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts (15126.6[c]).

- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project (15126.6[d]).

- The specific alternative of 'no project' shall also be evaluated along with its impact (15126.6[e][1]). The 'no project' analysis shall discuss the existing conditions at the time the Notice of Preparation is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (15126.6[e][2]).

- The range of alternatives required in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of

feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent) (15126.6[f]).

- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (15126.6[f][2][A]). If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location (15126.6[f][2][B]).

- An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (15126.6[f][3]).

Pursuant to the guidelines stated above, a range of alternatives to the proposed project is considered and evaluated in this Draft EIR. These alternatives were developed in the course of project planning and environmental review. The discussion in this section provides:

1. A description and analysis of impacts for each of the alternatives considered;

2. Comparative analysis of each alternative that focuses on the potentially significant unavoidable environmental impacts of the proposed project e.g., vehicle miles traveled (the purpose of this analysis is to determine whether alternatives are capable of eliminating or reducing the significant environmental impacts of the project to a less than significant level); and

3. Conclusions regarding the alternative's: (1) ability to avoid or substantially lessen the significant unavoidable impacts of the project; (2) ability to attain the project objectives (as stated below); and (3) merits compared to the merits of the proposed project.

5.2 PROPOSED PROJECT

The proposed project would develop the Legacy Ranch within the Northwest Open Space (NWOS) Specific Plan Area in San Juan Capistrano, California. The Legacy Ranch would consist of several different land uses arranged in seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core. Each core would incorporate community amenities, as described in more detail below.

Changes to permitted uses currently identified in the NWOS Specific Plan would include the following:

- Adding religious gatherings and removing caretaker quarters to the list of permitted events/uses at the Swanner House.

In addition to the permitted uses currently identified in the NWOS Specific Plan, the following proposed uses would be added as permitted uses:

- Farming-related retail stands and educational tours; and
- Passive recreation amenities.

Changes to the conditionally permitted uses currently identified in the NWOS Specific Plan would include the following:

- Changing the current conditionally permitted use pertaining to wedding venues to include all events venues, in addition to the Swanner House; and
- Changing the current conditionally permitted use to allow the sale and service of alcohol not involving the Swanner House.

In addition to the conditionally permitted uses currently identified in the NWOS Specific Plan, the following proposed conditionally permitted uses would be added as conditionally permitted uses:

- Eating and Drinking Establishments; and
- Group, social, public and private event activities with 499 or fewer participants so long as the use does not restrict public access to the public trails, dog park, and Putuidem Village. Events may include ancillary services such as shuttle services, bus and trailer parking, food and beverage services, and amplified sound.

The following uses would be added as accessory uses to permitted or conditionally permitted uses:

- A maximum of four Caretakers Residences; and
- Offices.

In addition, the NWOS Specific Plan includes clarification that the allowed uses for the portion of the NWOS Specific Plan area owned by Orange County Flood Control District (OCFCD) shall be governed by its General Plan land use designation of Community Park (CP) and General Open Space (GOS).

The proposed project also includes an Amendment to the NWOS Specific Plan to allow for development of the Legacy Ranch on the project site. The amended NWOS Specific Plan would add the new land uses and activities identified above as permitted, conditionally permitted, and accessory uses of the NWOS Specific Plan.

In addition, the proposed project is pursuing a Conditional Use Permit (CUP) for the use of the project site as a venue for group activities and community events, such as organized gatherings with a shared purpose (e.g., recreational, educational, cultural, or social), occurring between 8:00 a.m. and 11:00 p.m. The CUP would also allow food and beverage services, including the service of alcoholic beverages in full compliance with all applicable permits and regulations of the California

Department of Alcoholic Beverage Control (ABC) and the use of amplified sound equipment, provided it does not exceed the noise limits established in the City of San Juan Capistrano's Noise Ordinance. The CUP would permit a maximum of 499 combined on-site guests and participants at any one time, inclusive of individuals attending events at the Swanner House.

The proposed project would also amend the development standards of the NWOS Specific Plan, including reducing the required setback from the railroad track from 50 feet to 20 feet, removing the required internal setbacks from the Swanner House and Dr. Joe Cortese Dog Park, reducing the required setback from the existing trails from 25 feet to 5 feet, and changing the Trabuco Creek setback to be 100 feet from the conservation covenant boundary instead of the creek edge. In addition, the following structures would be permitted to be constructed within the required setbacks:

- Playgrounds;
- Public restrooms up to 1,500 square feet;
- Signage; and
- Shade structures with no more than 50 percent enclosed walls, 18 feet tall, and up to 500-square-foot setbacks may be reduced to 5 feet.

The proposed project also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The proposed project would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village. Opening year for the proposed project is anticipated to be 2032.

Access to the proposed Legacy Ranch would be provided by two ingress/egress driveways from Camino Capistrano, including the existing access driveway south of the Swanner House and one proposed driveways that would provide access to the Community Building Core and entry road parking areas. In addition, new internal asphalt roads would be constructed to provide access to the proposed parking areas within the Equestrian, Chapel, and Event Barn Cores. Overall, the proposed project would provide a total of approximately 802 dedicated parking spaces throughout the proposed cores, including the 20 truck and trailer parking spaces within the proposed Equestrian Core. For large events, an additional approximately 1,225 temporary parking spaces could be provided by utilizing other areas throughout the project site. The location of temporary parking would be determined as part of securing a CUP, which may require the need for valet parking or a Special Activities Permit, which could provide further additional temporary parking off-site and use of valet parking services.

The proposed project would also include a pedestrian bridge over Trabuco Creek that would connect the Community Building Core to the rest of the Legacy Ranch, internal decomposed granite roads, pedestrian paths, and new trail connections to the Trabuco Creek Trail throughout the project site.

The proposed project would include active and passive recreational facilities and extensive open space. Some existing trees and vegetation on the project site would be maintained, and the proposed project would include new landscaping throughout the project site. If present on the project site, existing trees that meet the criteria for designation as a Heritage Tree[1] would be integrated into the landscape plan for the proposed project. In addition, the removal of any existing mature tree (i.e., a tree with a trunk diameter of six inches or more measured at three feet above grade) would require a Tree Removal Permit pursuant to Section 9-3.557 of the City's Municipal Code. Tree removal would meet the City's Tree Removal Permit requirements and conditions, including those related to the replacement of a mature tree.

In addition, the approximately 14-acre existing conservation covenant encompassing Trabuco Creek and both its banks would be untouched. Development of proposed structures would be set back from the covenant boundary by an approximately 100-foot buffer, consistent with the NWOS Specific Plan Development Standards. Although the proposed pedestrian bridge over Trabuco Creek itself would traverse the 100-foot buffer and the Trabuco Creek conservation covenant, the footings for the proposed bridge are planned to be located outside of the jurisdictional boundary of the creek area.

There are three wells located on the project site. The northernmost well, located adjacent to the railroad tracks east of the Agricultural Core would be preserved. The existing access easement would also be preserved. The central well, located between the Equestrian Core and the Putuidem Village, would be integrated into the landscape plan as part of the proposed project. A future access easement would be incorporated into the circulation design for the proposed project in order to allow continued access to the northernmost well by the SMWD. The southernmost well, located in the Equestrian Core, would be abandoned and plugged as part of the proposed project.

5.2.1 Project Purpose and Objectives

The purpose of the proposed project is to transform under-utilized City-owned land into a vibrant, multi-functional community hub that honors and enhances San Juan Capistrano's rich equestrian and agricultural heritage. By creating a welcoming space that includes event venues, equestrian facilities, farming, and educational programming, the proposed project intends to foster a strong sense of community, provide opportunities for residents and visitors to engage with nature and the City's historical roots, and celebrate the unique character of the local equestrian culture. The proposed project would activate the property, offering inclusive spaces for special events, community gatherings, and hands-on learning experiences, thereby enriching the social, cultural, and recreational life of San Juan Capistrano.

The primary objectives of the proposed project are as follows:

[1] In the City, a tree is considered a heritage tree when the tree has a trunk diameter at breast height (dbh) of 36 inches or greater, and is a specimen of one of the following species: *Schinus molle* (California pepper); *Quercus* spp. (oak); *Cedar* spp. (cedar); *Eucalyptus globulus* (blue gum eucalyptus); *Juglans* spp. (walnut); *Olea europaea* (olive); *Platanus* spp. (sycamore); or *Populus* spp. (cottonwood).

1. Develop a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities.

2. Preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance.

3. Promote sustainable agricultural practices through orchards, row crops, and farm-related educational programs.

4. Provide diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors.

5. Enhance connectivity through trails and pedestrian infrastructure, integrating with the existing Trabuco Creek Trail.

6. Support local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment.

7. Ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant.

5.2.2 Significant Impacts of the Proposed project

The potential environmental effects of implementing the proposed project are analyzed in Chapter 4.0, Setting, Impacts, and Mitigation Measures. As discussed in more detail in Chapter 4.0 of this Draft EIR, impacts in the following areas would be less than significant and would not require any mitigation: aesthetics, air quality, energy, and greenhouse gas emissions. In addition, as discussed in Chapter 4.0, impacts in the following areas would be potentially significant without the implementation of mitigation measures, but would be reduced to a less than significant level if the mitigation measures recommended in this EIR are implemented: biological resources, cultural resources, geology and soils, hazards and hazardous material, hydrology and water quality, noise, and tribal cultural resources.

The proposed project would result in a significant and unavoidable impact related to transportation and traffic.

- As discussed in Section 4.17, Transportation, of this Draft EIR, in the project base year (2025), the proposed project's total City vehicle miles traveled (VMT) of 1,602,833 would be higher than the City's VMT threshold of 1,600,754 and would result in a net increase in VMT of 2,079 (0.13 percent).The proposed project would implement specific design features and includes several VMT reduction measures from the California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA Handbook), which could reduce the proposed project's operational VMT to below the City's threshold, including the provision of end-of-trip bicycle facilities and the implementation of an employer-sponsored vanpool, as detailed in **Mitigation Measure TRA-1**. However, it cannot be guaranteed that the project's employees would use these provided facilities, and the use of these provided facilities cannot be

monitored and enforced. Therefore, the VMT reduction provided by these measures may not be achieved and the proposed project would therefore result in a **significant and unavoidable** transportation impact related to VMT. As there are no additional feasible or enforceable mitigation measures that would reduce project VMT, operation of the proposed project would result in a result in a **significant and unavoidable** transportation impact related to VMT.

5.3 ALTERNATIVES CONSIDERED BUT REJECTED FROM FURTHER CONSIDERATION

The *State CEQA Guidelines* Section 15126.6(c) states that an EIR should identify any alternatives that were considered by the lead agency but were rejected during the scoping process and briefly explain the reasons underlying the lead agency's determination. In evaluating an appropriate range of alternatives to the proposed project, an Off-Site Locations Alternative, an Open Space Alternative, and a Farm Stay Core Alternative were considered and rejected by the City.

The following is a discussion of alternatives considered during the environmental review process and the reasons they were not selected for detailed analysis in this Draft EIR.

5.3.1 Off-Site Locations Alternative

State CEQA Guidelines Section 15126.6(f)(2) states that alternative locations should be considered if they would avoid or substantially lessen any of the significant effects or a proposed project. As discussed above, implementation of the proposed project would not result in significant and unavoidable impacts associated with being located within the NWOS area. In addition, because some of the project objectives are specific to the NWOS area (including objectives related to integrating the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village into new development while respecting their cultural and historical significance and enhancing connectivity through trails and pedestrian infrastructure with the existing Trabuco Creek Trail), implementation of an Off-Site Locations Alternative would not meet all of the identified project objectives. In addition, any development of the size and type proposed by the proposed project would generally have the same environmental effect regardless of where it was located in the city. Further, based on a review of other available sites, there are no other available properties of similar size (65.5 acres) that are designated for passive and active recreational uses.

Therefore, analysis of an alternative site for the proposed project is neither meaningful nor necessary, because the impacts and need for mitigation resulting from the proposed project would not be avoided or substantially lessened by its implementation. In addition, it is unlikely that development on another parcel would meet all of the project objectives. Therefore, the Off-Site Locations Alternative was rejected from further consideration.

5.3.2 Open Space Alternative

An Open Space Alternative, focusing on passive recreational uses, was also considered but rejected from further consideration. This alternative would improve the project site with passive recreational uses, such as enhanced trail connectivity, new restroom facilities, and additional parking. Under this alternative, no additional active recreational uses would be developed on the project site, such as equestrian uses or event spaces. In addition, no retail farm stands or sustainable agricultural uses would be developed on the project site. Although this alternative would reduce some the impacts of

the proposed project, including the proposed project's significant and unavoidable VMT impact, as the more intensive uses would not be developed, this alternative would not meet most of the project objectives, including those related to developing a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities; promoting sustainable agricultural practices through orchards, row crops, and farm-related educational programs; providing diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors; and supporting local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment. Therefore, the Open Space Alternative was rejected from further consideration.

5.3.3 Farm Stay Core Alternative

A Farm Stay Core Alternative was also considered but rejected from further consideration. This alternative would develop the Legacy Ranch at the project site, which would consist of several different land uses arranged in nine cores: Equestrian Core, Farm Stay Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, Natural Core, and Trail Core. The Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, Natural Core, and Trail Core would be similar to the proposed project, and the Farm Stay Core would consist of 70 ensuite "farm stay" units, including one-bedroom units that would be approximately 600 square feet and two-bedroom units that would be approximately 800 square feet; an approximately 5,880-square-foot farm stay center and amenities building; and outdoor recreation area featuring a swimming pool, amphitheater stage, and other community building uses/spaces. The Farm Stay Core would have gathering spaces, a dining hall and bar, support offices, a sundries shop, and support spaces for restrooms, pool deck showers, and similar needs.

Implementation of this alternative would meet most of the project objectives, including those related to developing a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities; promoting sustainable agricultural practices through orchards, row crops, and farm-related educational programs; providing diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors; and supporting local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment. However, the development of a Farm Stay Core and associated ensuite "farm stay" units, farm stay center and amenities building, and outdoor recreation area featuring a swimming pool, amphitheater stage, and other community building uses/spaces would increase impacts related to air quality, energy, greenhouse gas emissions, noise, transportation, and utilities compared to the proposed project. Therefore, the Farm Stay Core Alternative was rejected from further consideration.

5.3.4 Full Residential Development Alternative (Affordable Housing)A Full Residential Development Alternative (Affordable Housing) was considered and rejected from further consideration. Under this alternative, the entire project site would be developed with residential uses, all of which would be dedicated to affordable housing at a density of 30 dwelling units per acre (du/ac). Although implementation of a Full Residential Development Alternative (Affordable Housing) would avoid the proposed project's significant and unavoidable VMT impact as affordable housing projects are screened out from full VMT analysis under the City's VMT analysis framework and therefore presumed to have a less than significant VMT impact, implementation of a Full Residential Development Alternative (Affordable Housing) would likely result in greater environmental impacts related to aesthetics, air quality, biological resources, cultural resources, tribal cultural resources, and utilities compared to the proposed project as the overall development at the project site would be greater and would include more intense uses. Further, implementation of a Full Residential Development Alternative (Affordable Housing) would result in significant and unavoidable impacts related to cultural (historic) and tribal cultural resources as the Swanner House and Putuidem Village would be demolished to allow for full buildout of the project site.

Another factor considered was financing for an affordable housing residential development. The California Department of Housing and Community Development (HCD), through the CalHOME Program, provides a list of location criteria that would qualify a site for affordable housing financing. Typical factors that make an affordable housing project feasible for a specific location and qualify for affordable housing financing include proximity to public transit opportunities, proximity to employment opportunities, compatibility with neighborhood character, and compliance with zoning and general plan land use regulations. In addition, the California HCD considers if a site is constrained by significant environmental hazards or extraordinary site conditions that would undermine project feasibility. Although development of the project site with residential uses would be compatible with the neighborhood character, which includes existing residential uses, it would not be compliant with the existing zoning (Specific Plan/Precise Plan, governed by the NWOS SP 2020-01) or Community Park land use designation, without a General Plan Amendment and amendments to the NWOS SP 2020-01. In addition, the project site is not in close proximity to public transit opportunities or employment opportunities, and a portion of the project site is mapped by CAL FIRE as being within both a High Fire Hazard Severity Zone (FHSZ) and Moderate FHSZ, which could represent significant environmental hazards or extraordinary site conditions that could undermine project feasibility. Therefore, based on the project site's location, Full Residential Development Alternative (Affordable Housing) would not qualify for affordable housing financing.

In addition, implementation of a Full Residential Development Alternative (Affordable Housing) would not meet any of the project objectives, including those related to developing a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities; promoting sustainable agricultural practices through orchards, row crops, and farm-related educational programs; providing diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors; and supporting local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment. As previously discussed, implementation of a Full Residential

Development Alternative (Affordable Housing) would require an Amendment to the NWOS Specific Plan to change and add residential uses as an allowable use and update the Specific Plan development standards. The Full Residential Development Alternative (Affordable Housing) would also require a General Plan Amendment to change the project site's General Plan designation from Community Park to allow for residential development. These actions would require voter approval.

Because the Full Residential Development Alternative (Affordable Housing) would likely result in greater environmental impacts related to several environmental topic areas, including new significant and unavoidable impacts related to cultural (historic) and tribal cultural resources, and because the Full Residential Development Alternative (Affordable Housing) would not meet any of the project objectives, a Full Residential Development Alternative was rejected from further consideration.

5.3.5 Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing)

A Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) was considered and rejected from further consideration. Under this alternative, the majority of the project site would be developed the same as the proposed project and would include the Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core. However, the approximately 4.6-acre Community Building Core would be developed with residential uses, including a mix of affordable and market rate housing at a density of 30 du/ac. Although implementation of a Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) would reduce the proposed project's significant and unavoidable VMT impact, it is likely that VMT impacts would not be reduced to less than significant levels. In addition, implementation of a Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) would likely result in greater environmental impacts related to aesthetics, air quality, biological resources, and utilities compared to the proposed project as the overall development at the project site would be greater and would include more intense uses.

Implementation of this alternative would meet most of the project objectives, including those related to developing a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities; promoting sustainable agricultural practices through orchards, row crops, and farm-related educational programs; providing diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors; and supporting local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment. However, the overall amount of event space would be reduced compared to the proposed project.

Similar to the Full Residential Development Alternative (Affordable Housing), the Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) would not qualify for affordable housing financing due to the same factors (e.g., lack of proximity to public transit opportunities, lack of proximity to employment opportunities, zoning and general plan consistency issues, location adjacent to FHSZs representing significant environmental hazards or extraordinary site conditions).

Like the Full Residential Development Alternative (Affordable Housing), implementation of a Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) would require an Amendment to the NWOS Specific Plan to change and add residential uses as an allowable use and update the Specific Plan development standards. The Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) would also require a General Plan Amendment to change the area planned for the Community Building Core's General Plan designation from Community Park to allow for residential development. These actions would require voter approval.

Because the Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) would likely result in greater environmental impacts related to several environmental topic areas and would likely not qualify for affordable housing financing, implementation of a Partial Residential Development Alternative (Mix of Affordable and Market Rate Housing) would be infeasible and was therefore rejected from further consideration.

5.4 ALTERNATIVES UNDER CONSIDERATION

Section 21100 of the Public Resources Code (PRC) and Section 15126 of the *State CEQA Guidelines* require an EIR to identify and discuss a No Project Alternative and a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant environmental impacts. Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range of alternatives that could feasibly attain most of the basic objectives of the proposed project but that may avoid or substantially lessen any of the significant impacts of the proposed project.

The three alternatives to the proposed project that are discussed and evaluated in this chapter are detailed below. The following discussion summarizes the alternatives evaluated and how they meet CEQA requirements for the consideration of alternatives, and then provides an evaluation of each of the alternatives. The three alternatives evaluated in this Draft EIR are:

- **No Project Alternative.** Under the No Project Alternative, the project site would not be developed with the Legacy Ranch, and no additional active or passive recreation uses would be constructed. The project site would remain as it is in its current condition, with no grading, demolition of the existing approximately 1,600 square-foot barn, or new construction occurring within the project site. The project site would continue to provide natural open space areas, passive recreational uses, and would continue to be developed with the historic Roger Y. Williams/Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, the Putuidem Village, barn and associated storage containers, and existing hiking/equestrian trails.

- **Reduced Intensity Alternative.** Under the Reduced Intensity Alternative, the overall intensity of the proposed project would be reduced. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced from 149 to 90. A reduction in the number of full-time boarding stalls associated with the proposed Equestrian Core would result in an overall reduction in the daily use of the site by people boarding horses, as well as a reduction in the size and intensity of rodeo events hosted at the project site. This would result in an overall decrease in the intensity of uses at the project site. All other aspects of the Equestrian

Core would be the same as the proposed project. In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Therefore, the Reduced Intensity Alternative also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The Reduced Intensity Alternative would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village, similar to the proposed project.

- **Partial Residential Development Alternative (Market Rate Housing):** Under the Partial Residential Development Alternative (Market Rate Housing), the majority of the project site would be developed the same as the proposed project and would include the Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core. However, the approximately 4.6 acre Community Building Core would be developed with market rate housing at a density of 30 du/ac. Accordingly, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because the remainder of the project site would be developed consistent with the proposed project, the Partial Residential Development Alternative (Market Rate Housing) also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The Partial Residential Development Alternative (Market Rate Housing) would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village, similar to the proposed project.

These alternatives represent a reasonable range of potential alternatives to the proposed project in light of the objective of avoiding or reducing the severity of significant and unavoidable impacts and/or impacts identified as less than significant with mitigation, as discussed in Chapter 4.0 of this Draft EIR.

The purpose of this discussion of alternatives to the proposed project is to enable decision-makers and the public to evaluate the project by considering how alternatives to the project as proposed might reduce or avoid the project's impacts on the physical environment. The analysis in this chapter provides a qualitative evaluation of the environmental impacts that could be associated with each alternative and compares those potential impacts to those identified for the proposed project as described in Chapter 4.0, Setting, Impacts, and Mitigation Measures, of this Draft EIR. The analysis focuses on the topics addressed in Chapter 4.0. Topics not addressed in Chapter 4.0 but that were determined to have no impacts or less than significant impacts in Chapter 6.0, Other CEQA Considerations, include: agriculture and forestry resources, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire. These topics are not further addressed in this chapter.

5.5 ALTERNATIVES ANALYSIS

5.5.1 No Project Alternative

The following provides a description of the No Project Alternative and its anticipated environmental impacts. The emphasis of the analysis is on comparing the anticipated environmental impacts of the No Project Alternative to the environmental impacts associated with the proposed project. The discussion includes a determination of whether or not the No Project Alternative would reduce, eliminate, or create new significant environmental impacts, and whether it would or would not meet the objectives of the proposed project.

5.5.1.1 Description of Alternative

Under the No Project Alternative, the project site would not be developed with the Legacy Ranch, and no additional active or passive recreation uses would be constructed. The project site would remain as it is in its current condition, with no grading, demolition of the existing approximately 1,600 square-foot barn, or new construction occurring within the project site. The project site would continue to provide natural open space areas and would continue to be developed with the historic Roger Y. Williams/Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, the Putuidem Village, barn and associated storage containers, and existing hiking/equestrian trails. As the No Project Alternative would not develop the project site with the Legacy Ranch, the No Project Alternative would not require any amendments to the NWOS Specific Plan to change or add permitted, conditionally permitted, or accessory uses or change the development standards detailed in the NWOS Specific Plan. The No Project Alternative would also not require a Conditional Use Permit (CUP) for use of the project site as a venue for group activities and community events and allow food and beverage services, including the service of alcoholic beverages.

5.5.1.2 Comparison of Environmental Impacts

Aesthetics. Under the No Project Alternative, the existing visual character and quality of the project site and its surroundings would not be altered and would remain as it is in its existing condition. Accordingly, implementation of the No Project Alternative would not result in any change in the aesthetic character of the project site and would not result in any new sources of light or glare. Therefore, compared to the less than significant impacts of the proposed project, the No Project Alternative would have **no impact** related to aesthetics.

Air Quality. The No Project Alternative would not result in the development of the project with new uses, and no demolition or construction activity would occur within the project site. Accordingly, implementation of the No Project Alternative would not result in any increase in pollutant concentrations and dust, exhaust, and organic emissions related to construction would not be generated. Similarly, this alternative would not result in new exposure of residents to substantial pollutant concentrations, including toxic air contaminants (TACs). Implementation of the No Project Alternative would also not result in an increase in operational vehicle trips in the city; therefore, implementation of the alternative would not generate any air quality emissions associated with mobile uses. Therefore, compared to the less than significant air quality impacts associated with the proposed project, the No Project Alternative would have **no impact** on air quality.

Biological Resources. The No Project Alternative would not result in the development of the project with new uses, and the project site would remain as it is in its existing condition. No demolition or construction activity would occur within the project site. Accordingly, implementation of the No Project Alternative would not result in any impacts on biological resources, including special status species, riparian habitat or other sensitive natural communities, or wetlands. In addition, implementation of the No Project Alternative would not interfere with the movement of any wildlife species, impede the use of wildlife nursery sites, or conflict with any local policies or ordinances protecting biological resources. Because the No Project Alternative would not facilitate any development within the Buildout Area, **Mitigation Measures BIO-1 through BIO-17** and **Regulatory Compliance Measures HYD-1 through HYD-3** would not be applicable. Therefore, compared to the less than significant impacts on biological resources with mitigation incorporated associated with the proposed project, the No Project Alternative would have **no impact** on biological resources.

Cultural Resources. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. No demolition or construction activity would occur within the project site. Therefore, the existing Swanner House, which is considered a historical resource as defined in *State CEQA Guidelines* Section 15064.5, and Putuidem Village, which is eligible for listing in the National Register of Historic Places (NRHP) as a Traditional Cultural Property (TCP) due to its significance in the historic and ongoing cultural practices of the Acjachemen people, would not be impacted. In addition, implementation of the No Project Alternative would not include construction or other ground disturbance activities that could result in the accidental discovery of archeological and/or cultural resources, including human remains. Accordingly, **Regulatory Compliance Measures CUL-1** and **CUL-2** and **Mitigation Measures TCR-1** and **TCR-2** would not be applicable or required. Therefore, compared to the less than significant impacts on cultural resources with mitigation incorporated associated with the proposed project, the No Project Alternative would have **no impact** on cultural resources, including human remains.

Energy. The No Project Alternative would not result in the development of the project site with new uses, and no demolition or construction activity would occur within the project site. Accordingly, implementation of the No Project Alternative would not result in construction-related energy demand. Similarly, the No Project Alternative would not result in an increase in VMT, daily vehicle trips, or utility use (i.e., electricity and natural gas) within the project site. Therefore, the No Project Alternative would not result in impacts related to operational-period energy usage. Therefore, compared to the less than significant energy impacts associated with the proposed project, the No Project Alternative would have **no impact** related to energy.

Geology and Soils. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. No demolition, grading, or construction activity would occur within the project site. Accordingly, implementation of the No Project Alternative would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (including liquefaction), and landslides. In addition, as no development would occur, implementation of the No Project Alternative would not result in substantial soil erosion or the loss of topsoil, be located on an unstable geologic unit or

expansive/unstable soil, or result in any impacts related to alternative wastewater disposal systems. Therefore, **Regulatory Compliance Measures GEO-1** and **HYD-1** through **HYD-3** would not be applicable to the No Project Alternative.

In addition, implementation of the No Project Alternative would not include construction or other ground disturbance activities that could result in the accidental discovery of paleontology resources. Therefore, implementation of the No Project Alternative would not destroy a unique paleontological resource or site, either directly or indirectly and **Mitigation Measures PAL-1** and **PAL-2** would not be applicable or required for the No Project Alternative.

Therefore, compared to the less than significant impacts of the proposed project with the incorporation of mitigation, the No Project Alternative would have **no impact** related to geology and soils.

Greenhouse Gas Emissions. The No Project Alternative would not result in the development of the project site with new uses, and no demolition or construction activity would occur within the project site. Accordingly, implementation of the No Project Alternative would not result in the generation of construction-period GHG emissions. Similarly, the No Project Alternative would not result in an increase in VMT, daily vehicle trips, or utility use (i.e., electricity, natural gas, water, and wastewater) within the project site. Therefore, the No Project Alternative would not result in any GHG impacts related to project operations. Because the No Project Alternative would not facilitate any development within the project site, and **Mitigation Measure TRA-1**, requiring a Transportation Demand Management Plan which would reduce GHG emissions, would not be applicable. Therefore, compared to the less than significant GHG impacts with mitigation associated with the proposed project, the No Project Alternative would have **no impact** related to GHG.

Hazards and Hazardous Materials. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. No demolition, grading, or construction activity would occur within the project site. Accordingly, implementation of the No Project Alternative would not involve the routine transport, use, or disposal of hazardous materials; emit or handle hazardous materials within 0.25-mile of a school; or 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. In addition, as no development would occur, implementation of the No Project Alternative would not create a significant hazard to the public or the environment due to it being on a hazardous materials site identified pursuant to Government Code Section 65962.5; result in a safety hazard or excessive noise for people residing or working in the project area; impaired implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. In light of this, **Mitigation Measure HAZ-1** would not be applicable or required for the No Project Alternative. Therefore, compared to the less than significant impacts of the proposed project with the incorporation of mitigation, the No Project Alternative would have **no impact** related to hazards and hazardous materials.

Hydrology and Water Quality. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. No

demolition, grading, or construction activity would occur within the project site. As no construction activities would occur and the Buildout Area would remain the same as existing conditions, implementation of the No Project Alternative would not increase the potential for pollutants of concern from construction activities and vehicle traffic (e.g., fuels and lubricants, tire wear particulates, brake dust, and fallout from exhaust emissions) to be generated within the project site and conveyed in runoff during storm events. Therefore, the No Project Alternative would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality and **Regulatory Compliance Measures HYD-1** and **HYD-2**, would not be required. In addition, because the No Project Alternative would not result in the development of the project site, require additional water supply, or result in increased impervious surface area within the Buildout Area, implementation of the No Project Alternative would not substantially decrease groundwater supplies, interfere substantially with groundwater recharge, or substantially alter the existing drainage pattern of the site, and **Regulatory Compliance Measures HYD-3** and **HYD-4** and **Mitigation Measures HYD-1** would not be required. Implementation of the No Project Alternative would also not increase the risk of release of pollutants due to inundation beyond existing conditions and would also not conflict with applicable water quality control or sustainable groundwater management plans. Therefore, compared to the less than significant impacts of the proposed project with the incorporation of mitigation, the No Project Alternative would have **no impact** on hydrology and water quality.

Noise. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. No demolition, grading, or construction activity would occur within the project site. As no construction activities would occur, implementation of the No Project Alternative would not expose surrounding land uses to short-term noise or vibration during construction. In addition, noise at the project site would not increase above that already occurring on the site and no increase in traffic noise would occur. Because the No Project Alternative would not facilitate any development within the Buildout Area, **Mitigation Measures NOI-1** and **NOI-1** would not be applicable. Therefore, compared to the less than significant noise impacts with the incorporation of mitigation associated with the proposed project, the No Project Alternative would have **no impact** related to noise.

Transportation. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. No construction activity would occur within the project site. As no construction activities or development would occur, implementation of the No Project Alternative would not result in any increases in automobile, transit, bicycle, or pedestrian travel to or from the project site. In addition, because no development would occur, implementation of the No Project Alternative would not increase hazards due to a geometric design feature or incompatible uses or result in inadequate emergency access. Implementation of the No Project Alternative would also not result in any increase related to VMT as no increase in daily trips to and from the project site would occur. In light of this, **Mitigation Measure TRA-1** would not be applicable or required with implementation of the No Project Alternative. Therefore, compared to the significant and unavoidable transportation impacts associated with the proposed project, the No Project Alternative would have **no impact** related to transportation.

Tribal Cultural Resources. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. No demolition or construction activity would occur within the project site. Accordingly, implementation of the No Project Alternative would not result in the accidental discovery of tribal cultural resources and **Regulatory Compliance Measures CUL-1** and **CUL-2** and **Mitigation Measures TCR-1** and **TCR-2** would not be applicable or required. Therefore, compared to the less than significant impacts of the proposed project with the incorporation of mitigation, the No Project Alternative would have **no impact** related to tribal cultural resources.

Utilities and Service Systems. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. As no new uses would be constructed within the project site, implementation of the No Project Alternative would not result in any population increase in the city or increase in demand on utilities, including water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications, as compared to existing conditions. Therefore, compared to the less than significant impacts of the proposed project, the No Project Alternative would have **no impact** on utilities and service systems.

Wildfire. The No Project Alternative would not result in the development of the project site with new uses, and the project site would remain as it is in its existing condition. As no development is proposed, implementation of the No Project Alternative would not substantially impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildfire risks, or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. In addition, the No Project Alternative would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes. Therefore, compared to the less than significant impacts of the proposed project, the No Project Alternative would have **no impact** on relating to wildfire.

5.5.1.3 Attainment of Project Objectives

The No Project Alternative would not meet the underlying purpose of the proposed project and would not meet all of the project objectives. The attainment of project objectives is discussed further below.

1. Develop a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities.

   The No Project Alternative would not develop the project site with any new uses or improvements and would therefore not create a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities. Therefore, the No Project Alternative would not meet this project objective.

2. Preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance.

   While the No Project Alternative would preserve the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance, it would not develop the project site with any new uses or improvements and these existing uses would not be further integrated into the surrounding area. Therefore, the No Project Alternative would not meet this project objective.

3. Promote sustainable agricultural practices through orchards, row crops, and farm-related educational programs.

   The No Project Alternative would not develop the project site with any new uses, including new sustainable agricultural uses such as orchards, row crops, and farm-related educational programs. Therefore, the No Project Alternative would not meet this project objective.

4. Provide diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors.

   The No Project Alternative would not develop the project site with any new community amenities, including equestrian facilities and event spaces. Therefore, the No Project Alternative would not meet this project objective.

5. Enhance connectivity through trails and pedestrian infrastructure, integrating with the existing Trabuco Creek Trail.

   The No Project Alternative would not develop the project site with any new trail improvements or connections. Therefore, the No Project Alternative would not meet this project objective.

6. Support local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment.

   The No Project Alternative would not develop the project site with any new uses, such as retail farm stands and conditional event-based uses. Therefore, the No Project Alternative would not meet this project objective.

7. Ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant.

   The No Project Alternative would not develop the project site with any new uses or improvements. Therefore, the 14-acre Trabuco Creek conservation covenant would be preserved the same as existing conditions and the No Project Alternative would meet this project objective.

5.5.2 Reduced Intensity Alternative

The following provides a description of the Reduced Intensity Alternative and its anticipated environmental impacts. The emphasis of the analysis is on comparing the anticipated environmental impacts of the Reduced Intensity Alternative to the environmental impacts associated with the proposed project. The discussion includes a determination of whether or not the Reduced Intensity Alternative would reduce, eliminate, or create new significant environmental impacts, and whether it would or would not meet the objectives of the proposed project.

5.5.2.1 Description of Alternative

Under the Reduced Intensity Alternative, the overall intensity of the proposed project would be reduced. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced from 149 to 90. All other aspects of the Equestrian Core would be the same as the proposed project.

In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Accordingly, the Reduced Intensity Alternative also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The Reduced Intensity Alternative would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village, similar to the proposed project

Similar to the proposed project, the Reduced Intensity Alternative would require an Amendment to the NWOS Specific Plan to change and add permitted, conditionally permitted, or accessory uses, and update the Specific Plan development standards. The Reduced Intensity Alternative would also require a CUP for use of the project site as a venue for group activities and community events and allow food and beverage services, including vending of alcoholic beverages.

5.5.2.2 Comparison of Environmental Impacts

Aesthetics. Similar to the proposed project, development of the Reduced Intensity Alternative would alter the existing visual condition of the project site through the introduction of new development on the project site, although at a slightly reduced intensity. Because the Reduced Intensity Alternative would be located on the same project site as the proposed project, the Reduced Intensity Alternative would not substantially damage scenic resources within a State Scenic Highway as no officially designated State Scenic Highways exist in the city and the project site is not visible from either State Route (SR-74) or the portion of I-5 southwest of the SR-74 interchange, which are considered Eligible State Scenic Highways. In addition, because the Reduced Intensity Alternative would be designed to be consistent with the intended use of the project site and proposed design elements would be complementary of the surrounding visual character of the area and consistent with design guidelines detailed in the NWOS Specific Plan, the Reduced Intensity Alternative would not impact the visual character or quality of the project site and its surroundings, similar to the proposed project. The Reduced Intensity Alternative would also comply with the Lighting Standards provided in Chapter 9 of the City's Municipal Code and the City's Outdoor

Recreation Lighting Design Standards, as detailed in Table 3-27 in Section 9-3.529 of the City's Municipal Code, similar to the proposed. Therefore, the Reduced Intensity Alternative would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As described in Section 4.1, Aesthetics, the project site provides views of the adjacent open space area and nearby ridgelines under existing conditions. In addition, as the project site consists of open space and historical resources, views of the project site from adjacent development can also be considered a scenic vista. Construction activities associated with implementation of the Reduced Intensity Alternative would be similar to the proposed project and would result in site disturbance, movement of construction equipment, import and export of materials, views of incomplete buildings, and other activities that generally contrast with the existing aesthetic character of an area. Similar to the proposed project, construction activities would also be visible from surrounding roadways, including I-5 and Camino Capistrano, and adjacent open space areas. Grading and construction of new buildings and installation of landscaping would be temporarily disruptive. However, because of the temporary nature of construction activities, it would not substantially affect views of the project site or the surrounding area, similar to the proposed project. Therefore, construction of the Reduced Intensity Alternative would not substantially affect a scenic vista.

Because the Reduced Intensity Alternative includes the same uses as the proposed project, including equestrian facilities, chapel, agricultural uses, and event spaces, views to and from the project site during operation would generally be similar to the proposed project. Therefore, although development of the project site would alter views to and from the project site, these changes would not result in a substantial adverse effect on the project site as a scenic vista as the Reduced Intensity Alternative would generally maintain the project site as an open space recreational area, albeit with substantially enhanced landscaping, including trees. The overall development proposed under the alternative would be similar in type and scale as the existing development on the project site, including the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, and would adhere to the design guidelines detailed in the NWOS Specific Plan, similar to the proposed project. Specifically, proposed structures would be required to be designed in either the Rural Agrarian, Western or Early California style. Further, regardless of style, proposed structures would be required to relate to the Agrarian and Native American heritage of the NWOS area. Therefore, views of the project site, although altered, would be generally similar to existing conditions.

Similar to the proposed project, implementation of the Reduced Intensity Alternative may also alter views of adjacent open space areas and surrounding ridgelines, including those associated with the local San Juan Capistrano foothills, the San Joaquin Hills, and the Santa Ana Mountains. However, although the construction of the proposed buildings and implementation of new landscaping may partially obscure these views from the project site itself and may impede views from the surrounding area, partial views of adjacent open space areas and surrounding ridgelines would still exist from nearby public access points, including I-5, Camino Capistrano, and surrounding open space areas.

Overall, as the development envisioned under the Reduced Intensity Alternative would occur in generally the same location, pattern, and extent as that of the proposed project, it is reasonable to conclude that impacts related to the aesthetic condition and visual resources would be similarly **less**

than significant, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Air Quality. The Reduced Intensity Alternative would develop the project site with similar types of uses as the proposed project, but at a reduced intensity. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced from 149 to 90. This would result in an approximately 40 percent reduction in the number of stalls for full-time boarding. All other aspects of the Equestrian Core would be the same as the proposed project. In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because of the reduction in development, the Reduced Intensity Alternative would result in a reduction in the amount of pollutants emitted during construction and operation of the alternative.

Similar to the proposed project, during construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment from this alternative would include CO, NO_X, VOCs, directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter. However, construction emissions associated with the Reduced Intensity Alternative would be less than the proposed project due to the reduction in development. Accordingly, construction emissions associated with the Reduced Intensity Alternative are not expected to exceed the South Coast Air Quality Management District's (SCAQMD) thresholds, similar to the proposed project. Therefore, construction of the Reduced Intensity Alternative would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant, similar to the proposed project.

In addition, because construction emissions associated with the Reduced Intensity Alternative would be less than the proposed project due to the overall reduction in development, construction of the Reduced Intensity Alternative would also not cause an exceedance of the SCAQMD health risk thresholds and would not result in the exposure of nearby sensitive receptors to substantial pollutant concentrations, similar to the proposed project. Impacts resulting from the exposure of sensitive receptors to substantial pollutant concentrations during construction would be less than significant.

Similar to the proposed project, long-term air pollutant emission impacts from implementation of the Reduced Intensity Alternative are those associated with mobile sources (e.g., vehicle trips and truck trips), energy sources (e.g., electricity), area sources (e.g., architectural coatings and the use of landscape maintenance equipment). Mobile-source emissions include VOCs and NO_X emissions that contribute to the formation of O_3. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Similar to construction of the proposed project, because the emissions associated with the Reduced Intensity Alternative would be less than the proposed project due to the reduction in development, the Reduced Intensity Alternative is also not expected to exceed the SCAQMD's thresholds, similar to the proposed project. Therefore, operation of the Reduced Intensity

Alternative would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant, similar to the proposed project. Further, given the extremely low level of CO concentrations in the vicinity of the project site, and lack of traffic impacts at any intersections, vehicles associated with Reduced Intensity Alternative are not expected to contribute significantly to result in the CO concentrations exceeding the State or federal CO standards, similar to the proposed project.

Operational activities associated with the Reduced Intensity Alternative would be similar to the proposed project and would be primarily recreational and open-space related, including horseback riding, equine therapy, community events, weddings, agricultural programming, nature recreation, and limited catering/food-service operations. The Reduced Intensity Alternative would not introduce stationary sources of TACs, such as diesel generators, boilers, fuel-combustion equipment, or industrial operations. Routine project operations would involve light-duty vehicle trips from visitors, staff, and service vendors. Accordingly, TAC emissions from operation of the Reduced Intensity Alternative would be limited to intermittent on-site vehicle circulation, limited maintenance vehicle activity, and occasional vendor or service truck visits, similar to the proposed project. These activities are not anticipated to generate substantial quantities of diesel particulate emissions, and their frequency and duration would not result in sustained exposure that could elevate long-term cancer risk. In addition, all on-road and off-road vehicles accessing the project site would be subject to stringent State and federal emission regulations that substantially reduce exhaust pollutants, including DPM, similar to the proposed project.

Lastly, because the construction and operation of the Reduced Intensity Alternative would result in fewer emissions and an overall reduction in the intensity of equestrian uses at the project, the Reduced Intensity Alternative would also be consistent with applicable air quality standards and the growth assumptions in the 2022 Air Quality Management Plan (AQMP), similar to the proposed project.

Overall, because the Reduced Intensity Alternative would result in an overall reduction in development at the project site, construction and operational air quality impacts associated with implementation of the Reduced Intensity Alternative would generally be less than with implementation of the proposed project. Impacts would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Biological Resources. The Reduced Intensity Alternative would develop the project site with similar types of uses as the proposed project, but at a reduced intensity. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced from 149 to 90. This would result in an approximately 40 percent reduction in the number of stalls for full-time boarding. All other aspects of the Equestrian Core would be the same as the proposed project. In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, would be the same as proposed under the proposed project.

Because the Reduced Intensity Alternative would develop the same area as the proposed project, implementation of the Reduced Intensity Alternative would result in similar potential impacts, both directly and through habitat modifications, on special-status plant and wildlife species. Similar to the proposed project, implementation of the Reduced Intensity Alternative could result in potentially significant impacts on the following species:

- Thread-leaved brodiaea (*Brodiaea filifolia*)
- CRPR 1B and 2B plant species
- Crotch's bumble bee (*Bombus crotchii*)
- Monarch butterfly (*Danaus plexippus plexippus* pop. 1)
- Arroyo chub (*Gila Orcutt*)
- Southern California steelhead (*Oncorhynchus mykiss*)
- Pacific lamprey (*Entosphenus tridentatus*)
- Southwestern pond turtle (*Actinemys pallida*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Burrowing owl (*Athene cunicularia*)
- Cooper's hawk (*Astur cooperii*)
- white-tailed kite (*Elanus leucurus*)
- long-eared owl (*Asio otus*)
- Loggerhead shrike (*Lanius ludovicianus*)
- California horned lark (*Eremophila alpestris actia*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Yellow-breasted chat (*Icteria virens*)
- Yellow warbler (*Setophaga petechia*)
- Mountain lion (*Puma concolor*)
- Pallid bat (*Antrozous pallidus*)
- Western red bat (*Lasiurus blossevillii*)
- Western mastiff bat (*Eumops perotis californicus*)
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*)
- Big free-tailed bat (*Nyctinomops macrotis*)

Accordingly, the Reduced Intensity Alternative would also be required to implement **Mitigation Measures BIO-1 through BIO-17**, **Regulatory Compliance Measures HYD-1 through HYD-3**, and **Mitigation Measure HYD-1** in order to reduce potential impacts to less than significant.

Similar to the proposed project, the Reduced Intensity Alternative would also result in impacts on special-status riparian communities, including sycamore riparian woodland and coast live oak riparian forest due to realignment of the existing Trabuco Creek Trail. Accordingly, **Mitigation Measure BIO-9**, which requires the project Applicant to obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek, would remain applicable to the Reduced Intensity Alternative. With implementation of **Mitigation Measure BIO-9**, potential impacts associated with the loss of riparian woodland communities would be reduced to less than significant, similar to the

proposed project. The Reduced Intensity Alternative would also result in the loss of Mexican elderberry woodland, similar to the proposed project. However, similar to the proposed project, this loss would not be considered a substantial adverse effect because the amount of habitat loss would be limited compared to the amount available in the project region. Impacts would be less than significant, similar to the proposed project.

Similar to the proposed project, the Reduced Intensity Alternative could also result in impacts on waters under the jurisdiction of the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). Implementation of **Mitigation Measure BIO-9** and through the existing Section 404 permit, Section 401 Water Quality Certification, and Section 1602 Streambed Alteration Agreement regulatory process, would ensure that implementation of the Reduced Intensity Alternative would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant with mitigation incorporated, similar to the proposed project.

Construction of the Reduced Intensity Alternative would also result in indirect effects that could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of construction and then re-establish these functions once all temporary construction effects have been removed, similar to the proposed project. In addition, the Reduced Intensity Alternative would implement **Mitigation Measures BIO-14**, **BIO-16**, and **BIO-17**, similar to the proposed project, that would reduce these impacts to less than significant. Following construction of the Reduced Intensity Alternative, there is potential for increased long-term indirect effects to wildlife movement within Trabuco Creek due to increased noise, lighting, and other anthropogenic disturbance from operation of the alternative, similar to the proposed project. However, the implementation of **Mitigation Measures BIO-7, BIO-8, BIO-10, BIO-11, BIO-12, BIO-13,** and **BIO-15,** would reduce these impacts to less than significant, similar to the proposed project.

The Reduced Intensity Alternative would also be required to implement **Mitigation Measures BIO-7** and **BIO-9** in order to reduce potential impacts on the existing Trabuco Creek conservation covenant, similar to the proposed project, which would ensure that the alternative would not conflict with the provisions of an approved local, regional or State policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance. Lastly, implementation of **Mitigation Measures BIO-7** and **BIO-8** would ensure that the Reduced Intensity Alternative would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan, similar to the proposed project.

Overall, because the Reduced Intensity Alternative would develop the same area of the project site as the proposed project, impacts on biological resources associated with implementation of the Reduced Intensity Alternative would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Cultural Resources. The Reduced Intensity Alternative would develop the same project site as the proposed project, with the same types of uses but at a slightly reduced intensity. Similar to the proposed project, the Reduced Intensity Alternative would include the preservation of the existing uses on the project site, including the Swanner House and Putuidem Village, and does not include any alterations to the Swanner House, Swanner House property, or the reproduction of a local Native American village. Therefore, implementation of the Reduced Intensity Alternative would not cause a substantial adverse change in the significance of a historical resource as defined in *State CEQA Guidelines* Section 15064.5 or a known, unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5.

However, implementation of the Reduced Intensity Alternative would include ground disturbing activities similar to the proposed project, including grading and excavation, which has the potential to unearth previously unknown archaeological deposits or resources, resulting in a potential substantial adverse change in the significance of a unique archaeological resource, as defined in *State CEQA Guidelines* Section 15064.5. Therefore, construction of the Reduced Intensity Alternative would be required to adhere to **Regulatory Compliance Measure CUL-1**, similar to the proposed project, which requires monitoring by both a qualified archaeologist and a Native American monitor and includes procedures for recovering any significant or unique archaeological resource and for preparation of a report that documents any cultural resource recovery at the project site, consistent with CCR Section 15064.5(e), Health & Safety Code Section 7050.5, and City Council Policy 601.

In addition, as discussed further below, the Reduced Intensity Alternative would be required to implement **Mitigation Measures TCR-1** and **TCR-2**, which require Native American monitoring of all grading and trenching activities and the identification of a centralized repatriation and reburial area within the project site. These measures would ensure that the Reduced Intensity Alternative would not result in significant impacts on tribal cultural resources, similar to the proposed project.

Therefore, with adherence to **Regulatory Compliance Measure CUL-1** and implementation of **Mitigation Measures TCR-1** and **TCR-2,** implementation of the Reduced Intensity Alternative would not cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5, and impacts would be less than significant with mitigation incorporated.

Overall, impacts on cultural resources associated with implementation of the Reduced Intensity Alternative would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Energy. The Reduced Intensity Alternative would develop the project site with similar types of uses as the proposed project, but at a slightly reduced intensity. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced from 149 to 90. This would result in an approximately 40 percent reduction in the number of stalls for full-time boarding. All other aspects of the Equestrian Core would be the same as the proposed project. In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because of the reduction in development, the Reduced Intensity Alternative

would result in a reduction in the amount of energy used during construction and operation of the alternative.

Accordingly, energy use during construction of the Reduced Intensity Alternative, including fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles, would also have a negligible effect on local and regional energy supplies, similar to the proposed project. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Orange County's overall use of the State's available energy resources. Similar to the proposed project, no unusual characteristics of the Reduced Intensity Alternative would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Similar to the proposed project, the Reduced Intensity Alternative would also utilize construction equipment that meets Tier 3 emissions standards or higher, which would ensure fuel efficiency. Assuming the use of Tier 3 construction equipment is conservative as construction contractors would utilize Tier 4 equipment when feasible. Additionally, construction equipment and trucks would comply with CARB's anti-idling regulations, including the In-Use Off-Road Diesel-Fueled Fleets regulation, which would result in efficient use of construction-related energy and reduce fuel consumption, and on-road vehicles, such as haul trucks and worker vehicles, would be subject to federal fuel efficiency requirements. For these reasons, construction of the Reduced Intensity Alternative would not cause wasteful, inefficient, or unnecessary consumption of energy resources during construction, similar to the proposed project, and impacts would be less than significant.

Energy use associated with operation of the Reduced Intensity Alternative would be similar to the proposed project and would consist of natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. However, due to the reduction in stalls for full-time boarding, implementation of the Reduced Intensity Alternative would result in fewer vehicle trips to and from the project site and a corresponding reduction in fuel use. In addition, as discussed further below, the Reduced Intensity Alternative would also be required to implement **Mitigation Measure TRA-1**, which requires implementation of several VMT reduction measures, which would further reduce fuel consumption associated with vehicle travel. Therefore, operation of the Reduced Intensity Alternative 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, similar to the proposed project.

Overall, because the Reduced Intensity Alternative would result in an overall reduction in development at the project site, impacts related to energy use associated with implementation of the Reduced Intensity Alternative would generally be less than the proposed project. Impacts would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Geology and Soils. The Reduced Intensity Alternative would develop the same project site as the proposed project and would therefore be subject to the same geologic and soil conditions as the

proposed project. Similar to the proposed project, the Reduced Intensity Alternative could experience very strong seismically related ground shaking during the anticipated operational life of the alternative. Therefore, similar to the proposed project, all future construction and development on the project site would comply with applicable provisions of the CBC and the City's building regulations in effect at the time when building permit applications are submitted. In addition, **Regulatory Compliance Measure GEO-1,** which requires the implementation project-specific design and construction recommendations detailed in the Geotechnical Investigation, would be applicable to the Reduced Intensity Alternative. Proper engineering design and construction in compliance with the CBC standards and the recommendations in the Geotechnical Investigation would address potential impacts related to seismic ground shaking. In addition, similar to the proposed project, the Reduced Intensity Alternative would implement remediation measures related to the proposed pedestrian bridge foundations and Community Building to address potential liquefaction and post-liquefaction ground deformations and seismic settlement impacts, as required by **Regulatory Compliance Measure GEO-1**. Adherence to **Regulatory Compliance Measure GEO-1** would also ensure that the artificial fills and alluvial soils present in the upper several feet of the Community Building Core would be removed and recompacted in order to provide uniform soils characteristics, foundation slab, pavement, and flatwork for the proposed Community Building. Therefore, compliance with applicable provisions of the CBC and the City's building regulations and adherence to **Regulatory Compliance Measure GEO-1** would ensure that impacts related to being located on expansive soil would not be significant.

Construction of the Reduced Intensity Alternative at the project site would disturb surface soils and make them susceptible to erosion from wind and water and operation would increase the amount of impervious surface area on the project site, similar to the proposed project. An increase in impervious surface area increases the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters. However, **Regulatory Compliance Measures HYD-1, HYD-2,** and **HYD-3**, which require compliance with NPDES permit and City Municipal Code requirements and implementation of construction and operational water quality Best Management Practices (BMPs), and **Mitigation Measure HYD-1**, which requirements implementation of specific equestrian-related BMPs, would be applicable to the Reduced Intensity Alternative. Therefore, similar to the proposed project, with adherence to **Regulatory Compliance Measures HYD-1** through **HYD-3**, potential impacts related to soil erosion or loss of topsoil with implementation of the Reduced Intensity Alternative would be **less than significant**, and no mitigation is required.

Therefore, with adherence to **Regulatory Compliance Measures GEO-1** and **HYD-1** through **HYD-3,** impacts related to geology and soils with implementation of the Reduced Intensity Alternative would be **less than significant**, and no mitigation would be required.

Overall, impacts related to geology and soils associated with implementation of the Reduced Intensity Alternative would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Greenhouse Gas Emissions. The Reduced Intensity Alternative would develop the project site with similar types of uses as the proposed project, but at a slightly reduced intensity. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced

from 149 to 90. This would result in an approximately 40 percent reduction in the number of stalls for full-time boarding. All other aspects of the Equestrian Core would be the same as the proposed project. In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because of the reduction in development, the Reduced Intensity Alternative would result in a reduction in the amount of GHG emitted during construction and operation of the alternative.

Similar to the proposed project, construction activities associated with the Reduced Intensity Alternative would produce combustion emissions from various sources. In addition, long-term GHG emissions associated with the Reduced Intensity Alternative would be generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption (e.g., off-site utility providers), waste sources (e.g., land filling and waste disposal), and water sources (e.g., water supply and conveyance, treatment, and distribution). However, construction and operational GHG emissions associated with the Reduced Intensity Alternative would be less than the proposed project due to the reduction in development. Accordingly, GHG emissions associated with construction and operation of the Reduced Intensity Alternative are not expected to exceed the SCAQMD threshold of 3,000 MT CO_2e/yr, similar to the proposed project. Therefore, implementation of the Reduced Intensity Alternative would not have the potential to generate significant GHG emissions that would have a significant effect on the environment and impacts would be less than significant, similar to the proposed project.

In addition, similar to the proposed project, the Reduced Intensity Alternative would be required to comply with the latest Title 24 and CALGreen Code standards regarding energy conservation requirements as well as measures to reduce wastewater and water use. Further, with implementation of the VMT reduction strategies specified in **Mitigation Measure TRA-1** and the addition of EV charging stations, the Reduced Intensity Alternative would not conflict with the identified transportation and motor vehicle measures contained in the California Air Resources Board (CARB) 2022 Scoping Plan, similar to the proposed project. Therefore, implementation of the Reduced Intensity Alternative would not conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant, similar to the proposed project.

Overall, because the Reduced Intensity Alternative would result in an overall reduction in development at the project site, impacts related to GHG emissions associated with implementation of the Reduced Intensity Alternative would generally be less than the proposed project. Impacts would be similarly **less than significant with mitigation incorporated**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Hazards and Hazardous Materials. The Reduced Intensity Alternative would develop the same project site as the proposed project with similar types of uses, although at a slightly reduced intensity, and would therefore be subject to the same hazardous conditions as the proposed project. As described in Section 4.8, Hazardous and Hazardous Materials, hazardous conditions at the project site include two 250-gallon underground storage tanks (USTs) containing gasoline, an aboveground

storage tank (AST) containing diesel, an AST containing herbicide, approximately 150 cubic yards of diesel and waste oil contaminated soil, a 55-gallon steel drum containing unknown material, and potential contamination associated with the agricultural uses at the project site.

In addition, as the Reduced Intensity Alternative includes the demolition of the existing barn located on the eastern portion of the project site, similar to the proposed project, implementation of the Reduced Intensity Alternative would result in similar impacts related to the potential presence of ACMs and LBPs on an existing structure to be demolished as the proposed project. Based on the identification of the hazardous environmental issues identified above, the Reduced Intensity Alternative would also be required to implement **Mitigation Measure HAZ-1** requiring implementation of the recommendations detailed in the Phase I Environmental Site Assessment (ESA) including preparation of Phase II ESA.

As discussed in Section 4.8, Hazards and Hazardous Materials, a Phase II ESA was subsequently prepared and determined that the identified hazardous conditions at the project site do not represent a significant hazard to the public or the environment. Therefore, based on the above analysis and the site investigations performed as part of the Phase I ESA and Phase III ESA, implementation of the Reduced Intensity Alternative would not 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 with implementation of the remaining provisions of **Mitigation Measure HAZ-1**, similar to the proposed project.

Further, similar to the proposed project, small quantities of common hazardous materials would be used at the project site during construction and operation of the proposed project. Improper use, storage, or handling could result in the release of hazardous materials into the environment which could pose a risk to construction workers and the public. However, similar to the proposed project, the Reduced Intensity Alternative would be required to comply with existing government regulations in the use and disposal of these materials, and such materials would not be used in sufficient strength or quantity to create a substantial risk to human or environmental health.

Therefore, with implementation of **Mitigation Measure HAZ-1,** impacts related to hazards and hazardous materials with implementation of the Reduced Intensity Alternative would be **less than significant with mitigation incorporated**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Hydrology and Water Quality. The Reduced Intensity Alternative would develop the same project site as the proposed project with similar types of uses, although at a slightly reduced intensity, and would therefore be subject to the same hydrological conditions as the proposed project.

Construction of the Reduced Intensity Alternative would be similar to the proposed project and would result in similar pollutants of concern. Although the Reduced Intensity Alternative would result in less soil disturbance during construction due to the reduction in intensity and scale, the Reduced Intensity Alternative would also be subject to the requirements of the Construction General Permit and City's Municipal Code Sections 8-2.15, 8-2.16, and 8-14.107, which require preparation of a pollution control plan, construction BMP plan, and/or erosion and sediment control

plan, similar to the proposed project and specified in **Regulatory Compliance Measure HYD-1** and **Regulatory Compliance Measure HYD-2**.

Operation of the Reduced Intensity Alternative would be similar to the proposed project; however, due to the reduced intensity and scale, implementation of the Reduced Intensity Alternative would result in less impervious surface area at the project site. In addition, the Reduced Intensity Alternative would also be required to adhere to the San Diego RWQCB's Regional MS4 Permit. Accordingly, **Regulatory Compliance Measure HYD-3** would be applicable to the Reduced Intensity Alternative and a Final WQMP specifying the Site Design, Source Control, and LID BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff would be prepared and implemented. In addition, **Regulatory Compliance Measure HYD-4**, which requires preparation of a Final Hydrology and Hydraulics Analysis to confirm that the proposed on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded, would also be applicable to the Reduced Intensity Alternative, similar to the proposed project. Adherence with **Regulatory Compliance Measures HYD-1** through **HYD-4** would ensure that potential impacts associated with changes in the drainage pattern at the project site during construction and operation, including erosion and siltation, flooding on or off site, and increased runoff, and conflict with or obstruction of a water quality control plan or sustainable groundwater management plan would also be less than significant.

The Reduced Intensity Alternative includes a reduced Equestrian Core that would support equine activities similar to the proposed project, but at a reduced scale and intensity. Although horse waste, such as manure, urine and soiled bedding, are organic, biodegradable materials, many of their physical, biological, and chemical properties, including sediment, phosphorous, nutrients, and bacteria, can be detrimental to water quality and can adversely affect human health and aquatic life in water bodies. Accordingly, the Reduced Intensity Alternative would also be required to properly manage proposed equestrian activities, similar to the proposed project, including proper management of horse waste, in order to prevent associated pollutants from entering the stormwater system and downstream receiving waters, consistent with the equestrian-related water quality BMPs provided by the Orange County Public Works Department[2] and specified in **Mitigation Measure HYD-1.** Similar to the proposed project, the Reduced Intensity Alternative would be required to implement **Mitigation Measure HYD-1** to reduce potential water quality impacts associated with equestrian uses.

In addition, construction and operation of the Reduced Intensity Alternative would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin as no construction or operational groundwater dewatering would be required. Further, because water demand associated with the Reduced Intensity Alternative would be less than the proposed project and therefore less than significant, as discussed in more detail below, implementation of the Reduced Intensity Alternative would not deplete groundwater supplies associated with water use.

[2] Orange County Public Works. 2004. *Equestrian-Related Water Quality Best Management Practices.* June.

Therefore, with adherence to **Regulatory Compliance Measures HYD-1** through **HYD-3** and implementation of **Mitigation Measure HYD-1**, impacts related to hydrology and water quality with implementation of the Reduced Intensity Alternative would be **less than significant with mitigation incorporated**.

Overall, because the Reduced Intensity Alternative would result in an overall reduction in development at the project site, impacts related to hydrology and water quality associated with implementation of the Reduced Intensity Alternative would generally be less than the proposed project. Impacts would be similarly **less than significant with mitigation incorporated**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Noise. The Reduced Intensity Alternative would develop the same project site as the proposed project, with the same types of uses but at a slightly reduced intensity. Although development under the Reduced Intensity Alternative would be less intense than the proposed project, noise- and vibration-generating construction activities would be similar. Therefore, similar to the proposed project, the Reduced Intensity Alternative would be required to adhere to construction hour limits in Section 9-3.531(d)(4) of the City Municipal Code, as specified in **Regulatory Compliance Measure NOI-1**, to ensure construction noise impacts would be less than significant. In addition, similar to the proposed project, the Reduced Intensity Alternative's construction vibration impacts are also expected to be less than significant.

Operational noise associated with the Reduced Intensity Alternative would also be similar to the proposed project, including noise associated with traffic and stationary sources (i.e., Trails/Natural Core activities, spectator activity in the Equestrian Core, agricultural activity in the Agricultural Core, and HVAC equipment). However, due to the reduced intensity, noise during operation of the Reduced Intensity Alternative, specifically with regard to equestrian events, is expected to be less than operation of the proposed project. As discussed in Section 4.10, Noise, all long-term operational noise associated with the proposed project would be less than significant or reduced to less than significant with adherence to **Regulatory Compliance Measure NOI-2** and implementation of **Mitigation Measures NOI-1** and **NOI-2. Regulatory Compliance Measure NOI-2** would limit agricultural operations between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday pursuant to Section 9-3.531(d)(6) of the City Municipal Code, **Mitigation Measure NOI-1** requires an acoustical study be prepared to confirm HVAC noise would be in compliance with the City exterior noise standards, and **Mitigation Measure NOI-2** requires an acoustical study consisting of noise monitoring during three (3) peak activity weekends be prepared once the project is in operation to confirm compliance with the City exterior noise standards. The Reduced Intensity Alternative would also be required to adhere to **Regulatory Compliance Measure NOI-2** and implement **Mitigation Measures NOI-1** and **NOI-2**. Therefore, operational noise impacts would also be less than significant, similar to the proposed project. Further, the Reduced Intensity Alternative would not generate vibration during operation, similar to the proposed project.

Therefore, with adherence to **Regulatory Compliance Measures NOI-1** and **NOI-2** and implementation of **Mitigation Measures NOI-1** and **NOI-2**, noise impacts with implementation of the Reduced Intensity Alternative would be **less than significant with mitigation incorporated**.

Overall, because the Reduced Intensity Alternative would result in an overall reduction in development at the project site, noise impacts associated with implementation of the Reduced Intensity Alternative would generally be less than the proposed project. Impacts would be similarly **less than significant with mitigation incorporated**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Transportation. The Reduced Intensity Alternative would develop the project site with similar types of uses as the proposed project, but at a slightly reduced intensity. Specifically, the number of full-time boarding stalls associated with the proposed Equestrian Core would be reduced from 149 to 90. This would result in an approximately 40 percent reduction in the number of stalls for full-time boarding. All other aspects of the Equestrian Core would be the same as the proposed project. In addition, all other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because of the reduction in the number of full-time boarding stalls, the Reduced Intensity Alternative would result in a reduction in the number of vehicle trips to and from the project site during operation.

Similar to the proposed project, construction equipment and vehicles would be staged on-site. Although the Reduced Intensity Alternative does not include any characteristics (e.g., permanent road closure or long-term blocking of road access) that would physically impair or otherwise interfere with transit, roadways, bicycle facilities, and/or pedestrian facilities in the project vicinity, construction activities may require temporary lane or road closures on Camino Capistrano. However, similar to the proposed project, as required by the Northwest Open Space (NWOS) Specific Plan, and consistent with best construction site management practices, the Reduced Intensity Alternative would implement a construction worksite traffic control plan during construction activities that complies with applicable engineering standards outlined in the Caltrans' California Manual of Uniform Traffic Control Devices,[3] ensuring that construction activities which may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Therefore, construction of the Reduced Intensity Alternative would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities during construction, similar to the proposed project.

Similar to the proposed project, the Reduced Intensity Alternative would be required to comply with General Plan policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The Reduced Intensity Alternative would also be required to comply with City Administrative Policy No. 310, which establishes metrics for determining traffic impacts, consistent transportation-related goals and policies in the City's General Plan, and the Orange County CMP.

Consistent with applicable goals and policies contained in the City's General Plan, the inclusion of new pedestrian paths and trail connections under the Reduced Intensity Alternative, as well as the end-of-trip bicycle facilities required by **Mitigation Measure TRA-1,** would help to enhance the City's bicycle, pedestrian, and equestrian trails network (Circulation Element Goal 3 and Environmental

[3] California Department of Transportation (Caltrans). 2014. *California Manual on Uniform Traffic Control Devices* (CA MUTCD). Revised April 1, 2025.

Justice Element Goal 11). In addition, similar to the proposed project, the Reduced Intensity Alternative does not propose any improvements or alterations to the existing sidewalk and bicycle network in the vicinity of the project site. Proposed pedestrian paths and trails would connect to the existing pedestrian network and the Reduced Intensity Alternative would allow for the continuation of existing on-street (Class II) bicycle lanes provided on both sides of Camino Capistrano, the off-street bike path (Class I) provided on the east side of Rancho Viejo Road, and the on-street (Class II) bicycle lane provided on the north side of the segment of Junipero Serra Road between Camino Capistrano and the I-5 southbound off-ramp. Accordingly, the Reduced Intensity Alternative would be consistent with the City's goals of providing a circulation system that meets the needs of the community and minimizing conflict between vehicles, pedestrians, equestrians, and bicycles (Circulation Element Goals 1 and 4 and Environmental Justice Element Goals 4 and 12), similar to the proposed project. Therefore, similar to the proposed project, the Reduced Intensity Alternative would not conflict with applicable provisions in the City's General Plan Circulation Element.

In addition, because the Reduced Intensity Alternative would result in a similar significant impact related to VMT, even with implementation of VMT reduction measures as required by **Mitigation Measure TRA-1** and discussed below, implementation of the Reduced Intensity Alternative would also result in conflicts with City Administrative Policy No. 310, similar to the proposed project. Further, due to the distance from the project site to the only CMP intersection in the city (Ortega Highway/Interstate 5 (I-5) ramp) and because the intersection does not provide direct regional access to the project site, the Reduced Intensity Alternative is not expected to result in any impacts to this intersection would, therefore, not result in conflicts with the Orange County CMP, similar to the proposed project.

As discussed above, because the Reduced Intensity Alternative would result in a 40 percent reduction in number of stalls for full-time boarding at the project site compared to the proposed project, the Reduced Intensity Alternative would result in a reduction in the number of vehicle trips to and from the project site during operation. This would also result in less VMT during operation compared to the proposed project. **Mitigation Measure TRA-1** would remain applicable to the Reduced Intensity Alternative and the VMT reduction measures detailed in **Mitigation Measure TRA-1**, including the provision of end-of-trip bicycle facilities and the implementation of an employer-sponsored vanpool, would be incorporated into the alternative. However, similar to the proposed project it cannot be guaranteed that employees would use these provided facilities, and the use of these provided facilities cannot be enforced or monitored. Therefore, the VMT reduction provided by these measures may not be achieved and the Reduced Intensity Alternative would continue to result in a **significant and unavoidable** transportation impact related to VMT, similar to the proposed project. Therefore, implementation of the Reduced Intensity Alternative would conflict or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b), and impacts would be significant and unavoidable, similar to the proposed project.

Overall, because the Reduced Intensity Alternative would result in an overall reduction in development at the project site, transportation impacts associated with implementation of the Reduced Intensity Alternative would generally be less than the proposed project. However, impacts would be similarly **significant and unavoidable**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Tribal Cultural Resources. The Reduced Intensity Alternative would develop the same project site as the proposed project, with the same types of uses but at a slightly reduced intensity. Similar to the proposed project, the Reduced Intensity Alternative would include the preservation of the existing uses on the project site, including the Putuidem Village, and does not include any alterations to the site. Accordingly, the Reduced Intensity Alternative would be designed to avoid known tribal cultural resources at the project site, similar to the proposed project. In addition, as discussed above, construction of the Reduced Intensity Alternative would be required to adhere to **Regulatory Compliance Measure CUL-1**, which details provisions in the event that unknown cultural resources are discovered during ground-disturbing construction activities, and **Regulatory Compliance Measure CUL-2**, which details provisions for if human remains are encountered at the project site. Adherence to these measures would ensure that potential impacts to previously unknown cultural resources, including tribal cultural resources and human remains, would be less than significant.

In addition, the Reduced Intensity Alternative would also be required to implement the requests from the Juaneño Band of Mission Indians Acjachemen Nation provided during tribal consultation, including Native American monitoring of all grading and trenching activities and the identification of a centralized repatriation and reburial area within the project site, as detailed in **Mitigation Measures TCR-1** and **TCR-2**.

Therefore, with adherence to **Regulatory Compliance Measures CUL-1** and **CUL-2** and implementation of **Mitigation Measures TCR-1** and **TCR-2**, impacts related to tribal cultural resources with implementation of the Reduced Intensity Alternative would be **less than significant with mitigation incorporated**.

Overall, impacts on tribal cultural resources associated with implementation of the Reduced Intensity Alternative would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Utilities and Service Systems. The Reduced Intensity Alternative would develop the same project site as the proposed project, with the same types of uses but at a slightly reduced intensity. Similar to the proposed project, the Reduced Intensity Alternative would connect to existing utility infrastructure in the vicinity of the project site and would include similar utility infrastructure improvements. However, due to the reduced scale and intensity, the Reduced Intensity Alternative would result in a reduction in utility demand compared to the proposed project, including water, wastewater, stormwater, electricity, natural gas, and telecommunications. Because implementation of the proposed project would not require, nor would it result in, the construction of new utilities facilities or the expansion of existing facilities beyond the improvements included in the proposed project, as discussed in Section 4.13, Utilities and Service Systems, implementation of the Reduced Intensity Alternative would also not require, nor would it result in, the construction of new utilities facilities or the expansion of existing facilities beyond those included in the Reduced Intensity Alternative.

In addition, because the proposed project would result in a negligible increase in water and wastewater demand on the Santa Margarita Water District's (SMWD's) projected service-wide annual water demand and wastewater treatment capacity, and the Reduced Intensity Alternative

would result in a decreased demand on water and wastewater services, the Reduced Intensity Alternative would also have less than significant impacts on water and wastewater service and capacity. Further, because the proposed 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 goal, and the Reduced Intensity Alternative would result in less sold waste generation, the Reduced Intensity Alternative would also have a less than significant impact related to solid waste.

Overall, because the Reduced Intensity Alternative would result in an overall reduction in development at the project site, impacts on utilities and service systems associated with implementation of the Reduced Intensity Alternative would generally be less than with implementation of the proposed project. Impacts would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

Wildfire. The Reduced Intensity Alternative would develop the same project site as the proposed project, with the same types of uses but at a slightly reduced intensity. The Reduced Intensity Alternative would also include similar vehicle access and circulation improvements to the project site. Construction of these roadway and utility improvements may require road closures or detours in the immediate vicinity of the project site, including on Camino Capistrano, a designated emergency evacuation route, similar to the proposed project. Similar to the proposed project, the contractor would be required to implement a construction worksite traffic control plan that complies with applicable engineering standards outlined in the California Manual of Uniform Traffic Control Devices,[4] ensuring that construction activities, which may temporarily restrict vehicular traffic, would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Therefore, construction activities would not impact vehicle flow and the Reduced Intensity Alternative would not physically impair or interfere with emergency response or evacuation in the project vicinity, similar to the proposed project.

In addition, because all circulation improvements would be constructed in accordance with applicable standards associated with vehicular access, resulting in the provision of adequate emergency access and evacuation, operation of the Reduced Intensity Alternative would not interfere with emergency access to and from the project site. Similar to the proposed project, the design of the Reduced Intensity Alternative would be submitted for review and approval by the OCFA, which provides fire and emergency medical services in the city, and the Orange County Sheriff's Department, which provides primary law enforcement services for the city, prior to the issuance of building permits in order to ensure development would not interfere with the City's Emergency Management framework. In addition, because the Reduced Intensity Alternative would not result in any permanent alterations to Camino Capistrano or I-5, the Reduced Intensity Alternative would not disrupt evacuation via Camino Capistrano and I-5 in the event of an emergency and adherence to the emergency access measures required by the City would ensure

[4] California Department of Transportation (Caltrans). 2014. *California Manual of Uniform Traffic Control Devices,* Federal Highway Administration's MUTCD 2009 Edition, including Revision 1, 2, & 3 as amended for use in California, 14th Editions, Revision 9.

that potential impacts related to physical interference with an adopted emergency response plan or emergency evacuation plan would be less than significant, similar to the proposed project.

The Reduced Intensity Alternative would also be required to adhere to applicable City building and fire codes as part of development and would be developed consistent with General Plan's wildfire policies, including Safety Element Policy 1.6 requiring reducing the risk of wildfire hazards by requiring fuel modification for landscaping and defensible space in areas most at risk of wildfire, similar to the proposed project. By complying with these regulations, implementation of the Reduced Intensity Alternative would reduce wildfire risks, reduce potential wildfire associated pollutant concentrations, and help prevent the uncontrolled spread of a wildfire. Impacts would be less than significant, similar to the proposed project, and no mitigation is required. Further, the installation of all utility improvements would be implemented in accordance with the current California Building Code, California Fire Code, and applicable local ordinances, and impacts related to the installation or maintenance of infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment would be less than significant, similar to the proposed project.

In addition, because the Reduced Intensity Alternative would be developed on the same site as the proposed project, impacts related to landslides and flooding would be less than significant, similar to the proposed project.

Overall, because the Reduced Intensity Alternative would develop the same site as the proposed project, impacts related to wildfire associated with implementation of the Reduced Intensity Alternative would generally be similar to the proposed project. Impacts would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Reduced Intensity Alternative compared to the proposed project.

5.5.2.3 Attainment of Project Objectives

The Reduced Intensity Alternative would generally meet the underlying purpose of the proposed project and all of the project objectives, although to a lesser extent than the proposed project. The attainment of project objectives is discussed further below.

1. Develop a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities.

   The Reduced Intensity Alternative would develop the project site with the Legacy Ranch, which consists of a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities, although at a reduced scale. Therefore, although the Reduced Intensity Alternative would meet this project objective, it would not satisfy this objective to the same extent as the proposed project.

2. Preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance.

The Reduced Intensity Alternative would preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance, similar to the proposed project. Therefore, the Reduced Intensity Alternative would meet this project objective to a similar extent as the proposed project.

3. Promote sustainable agricultural practices through orchards, row crops, and farm-related educational programs.

   The Reduced Intensity Alternative would develop the project site with new sustainable agricultural uses such as orchards, row crops, and farm-related educational programs. Therefore, the Reduced Intensity Alternative would meet this project objective to a similar extent as the proposed project.

4. Provide diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors.

   The Reduced Intensity Alternative would develop the project site with new community amenities, including equestrian facilities and event spaces. However, the Reduced Intensity Alternative would result in an approximately 40 percent reduction in the total number of stalls for full-time boarding. Therefore, although the Reduced Intensity Alternative would meet this project objective, it would not satisfy this objective to the same extent as the proposed project.

5. Enhance connectivity through trails and pedestrian infrastructure, integrating with the existing Trabuco Creek Trail.

   The Reduced Intensity Alternative would develop the project site with new trail improvements and connections, similar to the proposed project. Therefore, the Reduced Intensity Alternative would meet this project objective to a similar extent as the proposed project.

6. Support local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment.

   The Reduced Intensity Alternative would develop the project site with new uses that would support local economic growth, including retail farm stands and conditional event-based uses, such as weddings and live entertainment. However, the Reduced Intensity Alternative would result in an approximately 40 percent reduction in the total number of stalls for full-time boarding. Therefore, although the Reduced Intensity Alternative would meet this project objective, it would not satisfy this objective to the same extent as the proposed project.

7. Ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant.

   The Reduced Intensity Alternative would be constructed to ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant, similar to the proposed project. Therefore, the Reduced Intensity Alternative would meet this project objective to a similar extent as the proposed project.

5.5.3 Partial Residential Development Alternative (Market Rate Housing)

The following provides a description of the Partial Residential Development Alternative (Market Rate Housing) and its anticipated environmental impacts. The emphasis of the analysis is on comparing the anticipated environmental impacts of the Partial Residential Development Alternative (Market Rate Housing) to the environmental impacts associated with the proposed project. The discussion includes a determination of whether or not the Partial Residential Development Alternative (Market Rate Housing) would reduce, eliminate, or create new significant environmental impacts, and whether it would or would not meet the objectives of the proposed project.

5.5.3.1 Description of Alternative

Under the Partial Residential Development Alternative (Market Rate Housing), the majority of the project site would be developed the same as the proposed project and would include the Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core.

However, the approximately 4.6-acre Community Building Core would be developed with residential uses, including market rate housing at a density of 30 du/ac. Accordingly, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because the remainder of the project site would be developed consistent with the proposed project, the Partial Residential Development Alternative (Market Rate Housing) also includes the preservation of the existing uses on the project site, including the Swanner House, Dr. John Cortese Dog Park, and Putuidem Village, and would provide greater access to each of these existing uses. The Partial Residential Development Alternative (Market Rate Housing) would also include a new 2,500-square-foot food service area within the dog park and 162 standard parking spaces associated with the dog park and the Putuidem Village, similar to the proposed project.

Similar to the proposed project, implementation of a Partial Residential Development Alternative (Market Rate Housing) would require an Amendment to the NWOS Specific Plan to change and add residential uses as an allowable use and update the Specific Plan development standards. The Partial Residential Development Alternative (Market Rate Housing) would also require a General Plan Amendment to change the project site's General Plan designation from Community Park to allow for residential development. These actions would require voter approval.

Similar to the proposed project, the Reduced Intensity Alternative would require an Amendment to the NWOS Specific Plan to change and add permitted, conditionally permitted, or accessory uses, and update the Specific Plan development standards. The Reduced Intensity Alternative would also require a CUP for use of the project site as a venue for group activities and community events and allow food and beverage services, including vending of alcoholic beverages.

5.5.3.2 Comparison of Environmental Impacts

Aesthetics. Similar to the proposed project, development of the Partial Residential Development Alternative (Market Rate Housing) would alter the existing visual condition of the project site

through the introduction of new development on the project site. However, because the Partial Residential Development Alternative (Market Rate Housing) includes 138 new residential units to replace the one Community Building that would be constructed within the Community Building Corer area, the change in visual conditions at the project site would be slightly greater.

Because the Partial Residential Development Alternative (Market Rate Housing) would be located on the same project site as the proposed project, the Reduced Intensity Alternative would not substantially damage scenic resources within a State Scenic Highway as no officially designated State Scenic Highways exist in the city and the project site is not visible from either State Route (SR-74) or the portion of I-5 south of the SR-74 interchange, which are considered Eligible State Scenic Highways.

In addition, because the majority of the Partial Residential Development Alternative (Market Rate Housing) would be designed to be consistent with the currently intended use of the project site and because all proposed design elements would be complementary of the surrounding visual character of the area and consistent with design guidelines detailed in the NWOS Specific Plan, the Partial Residential Development Alternative (Market Rate Housing) would not substantially impact the visual character or quality of the project site and its surroundings, similar to the proposed project. The Partial Residential Development Alternative (Market Rate Housing) would also comply with the Lighting Standards provided in Chapter 9 of the City's Municipal Code and the City's Outdoor Recreation Lighting Design Standards, as detailed in Table 3-27 in Section 9-3.529 of the City's Municipal Code, similar to the proposed. Therefore, the Partial Residential Development Alternative (Market Rate Housing) would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As described in Section 4.1, Aesthetics, the project site provides views of the adjacent open space area and nearby ridgelines under existing conditions. In addition, as the project site consists of open space and historical resources, views of the project site from adjacent development can also be considered a scenic vista. Construction activities associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be similar to the proposed project and would result in site disturbance, movement of construction equipment, import and export of materials, views of incomplete buildings, and other activities that generally contrast with the existing aesthetic character of an area. Similar to the proposed project, construction activities would also be visible from surrounding roadways, including I-5 and Camino Capistrano, and adjacent open space areas. Grading and construction of new buildings and installation of landscaping would be temporarily disruptive. However, because of the temporary nature of construction activities, it would not substantially affect views of the project site or the surrounding area, similar to the proposed project. Therefore, construction of the Partial Residential Development Alternative (Market Rate Housing) would not substantially affect a scenic vista.

Because the Partial Residential Development Alternative (Market Rate Housing) includes much of the same uses as the proposed project, including equestrian facilities, chapel, agricultural uses, and event spaces, views to and from the project site during operation would generally be similar to the proposed project. However, as previously discussed above, the construction of 138 new residential units to replace the one Community Building that would be constructed within the Community Building Core area would result in a greater change in visual conditions at the project site compared

to the proposed project. These residential units would be designed to be complementary of the surrounding visual character of the area, including the existing residential uses in the surrounding area. Specifically, proposed structures would be required to be designed in either the Rural Agrarian, Western or Early California style. Further, regardless of style, proposed structures would be required to relate to the Agrarian and Native American heritage of the NWOS area. Therefore, although development of the project site would alter views to and from the project site to a greater degree than the proposed project, these changes would not result in a substantial adverse effect on the project site as a scenic vista. Therefore, views of the project site, although altered, would be generally similar to existing conditions.

Similar to the proposed project, implementation of the Partial Residential Development Alternative (Market Rate Housing) may also alter views of adjacent open space areas and surrounding ridgelines, including those associated with the local San Juan Capistrano foothills, the San Joaquin Hills, and the Santa Ana Mountains. However, although the construction of the proposed buildings and implementation of new landscaping may partially obscure these views from the project site itself and may impede views from the surrounding area, partial views of adjacent open space areas and surrounding ridgelines would still exist from nearby public access points, including I-5, Camino Capistrano, and surrounding open space areas.

Overall, as the development envisioned under the Partial Residential Development Alternative (Market Rate Housing) would occur in generally the same location, pattern, and extent as that of the proposed project, impacts related to the aesthetic condition and visual resources would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Air Quality. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because the Partial Residential Development Alternative (Market Rate Housing) would include the construction of 138 market rate housing units at the project site, the Partial Residential Development Alternative (Market Rate Housing) would result in a greater amount of pollutants emitted during construction and operation of the alternative compared to the proposed project.

Similar to the proposed project, during construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment from this alternative would include CO, NO_X, VOCs, directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter. Although construction emissions associated with the Partial Residential Development Alternative (Market Rate Housing) would be greater than the proposed project due to the construction of 138 residential units, construction emissions associated with the Partial Residential Development Alternative (Market Rate Housing) are not expected to exceed the South Coast Air Quality Management District's (SCAQMD) thresholds, similar to the proposed project.

Therefore, construction of the Partial Residential Development Alternative (Market Rate Housing) would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant, similar to the proposed project.

Similarly, although construction emissions associated with the Reduced Intensity Alternative would be greater than the proposed project due to the overall reduction in development, construction of the Partial Residential Development Alternative (Market Rate Housing) would also not cause an exceedance of the SCAQMD health risk thresholds and would not result in the exposure of nearby sensitive receptors to substantial pollutant concentrations, similar to the proposed project. The area that would be developed with residential uses is not adjacent to or near any sensitive receptors. Therefore, the increased construction activity in this area would not result in new or greater health impacts to the nearest sensitive receptors, which are located north and south of the project site. Impacts resulting from the exposure of sensitive receptors to substantial pollutant concentrations during construction would be less than significant, similar to the proposed project.

Similar to the proposed project, long-term air pollutant emission impacts from implementation of the Partial Residential Development Alternative (Market Rate Housing) are those associated with mobile sources (e.g., vehicle trips and truck trips), energy sources (e.g., electricity), area sources (e.g., architectural coatings and the use of landscape maintenance equipment). Mobile-source emissions include VOCs and NO_X emissions that contribute to the formation of O_3. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Because the Partial Residential Development Alternative (Market Rate Housing) would include residential uses, it is anticipated that operation of the Partial Residential Development Alternative (Market Rate Housing) would generate additional vehicle trips to and from the project site as compared to the proposed project. This would generate additional operational emissions compared to the proposed project. Although the operational emissions associated with the Partial Residential Development Alternative (Market Rate Housing) would be greater than the proposed project, the Partial Residential Development Alternative (Market Rate Housing) is also not expected to exceed the SCAQMD's thresholds, similar to the proposed project. Therefore, operation of the Partial Residential Development Alternative (Market Rate Housing) would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant, similar to the proposed project. Further, given the extremely low level of CO concentrations in the vicinity of the project site, and lack of traffic impacts at any intersections, vehicles associated with Partial Residential Development Alternative (Market Rate Housing) are not expected to contribute significantly to result in the CO concentrations exceeding the State or federal CO standards, similar to the proposed project.

Operational activities associated with the Partial Residential Development Alternative (Market Rate Housing) would generally be similar to the proposed project and would be primarily recreational and open-space related, including horseback riding, equine therapy, community events, weddings, agricultural programming, nature recreation, and limited catering/food-service operations. However, the Partial Residential Development Alternative (Market Rate Housing) would also include

residential uses. Nevertheless, the Partial Residential Development Alternative (Market Rate Housing) would not introduce stationary sources of TACs, such as diesel generators, boilers, fuel-combustion equipment, or industrial operations. Routine project operations would involve light-duty vehicle trips from visitors, staff, service vendors, and residents. Accordingly, TAC emissions from operation of the Partial Residential Development Alternative (Market Rate Housing) would be limited to on-site vehicle circulation, limited maintenance vehicle activity, and occasional vendor or service truck visits, similar to the proposed project. These activities are not anticipated to generate substantial quantities of diesel particulate emissions, and their frequency and duration would not result in sustained exposure that could elevate long-term cancer risk. In addition, all on-road and off-road vehicles accessing the project site would be subject to stringent State and federal emission regulations that substantially reduce exhaust pollutants, including DPM, similar to the proposed project.

Lastly, construction and operation of the Partial Residential Development Alternative (Market Rate Housing) would also be consistent with applicable air quality standards and the growth assumptions in the 2022 Air Quality Management Plan (AQMP), similar to the proposed project.

Overall, because the Partial Residential Development Alternative (Market Rate Housing) would result in an overall increase in development intensity and type at the project site, construction and operational air quality impacts associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be slightly greater than with implementation of the proposed project. Nevertheless, impacts would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Biological Resources. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project.

Because the Partial Residential Development Alternative (Market Rate Housing) would develop the same area as the proposed project, implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in similar potential impacts, both directly and through habitat modifications, on special-status plant and wildlife species. Similar to the proposed project, implementation of the Partial Residential Development Alternative (Market Rate Housing)could result in potentially significant impacts on the following species:

- Thread-leaved brodiaea (*Brodiaea filifolia*)
- CRPR 1B and 2B plant species
- Crotch's bumble bee (*Bombus crotchii*)
- Monarch butterfly (*Danaus plexippus plexippus* pop. 1)

- Arroyo chub (*Gila Orcutt*)
- Southern California steelhead (*Oncorhynchus mykiss*)
- Pacific lamprey (*Entosphenus tridentatus*)
- Southwestern pond turtle (*Actinemys pallida*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Burrowing owl (*Athene cunicularia*)
- Cooper's hawk (*Astur cooperii*)
- white-tailed kite (*Elanus leucurus*)
- long-eared owl (*Asio otus*)
- Loggerhead shrike (*Lanius ludovicianus*)
- California horned lark (*Eremophila alpestris actia*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Yellow-breasted chat (*Icteria virens*)
- Yellow warbler (*Setophaga petechia*)
- Mountain lion (*Puma concolor*)
- Pallid bat (*Antrozous pallidus*)
- Western red bat (*Lasiurus blossevillii*)
- Western mastiff bat (*Eumops perotis californicus*)
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*)
- Big free-tailed bat (*Nyctinomops macrotis*)

Accordingly, the Partial Residential Development Alternative (Market Rate Housing) would also be required to implement **Mitigation Measures BIO-1 through BIO-17**, **Regulatory Compliance Measures HYD-1 through HYD-3**, and **Mitigation Measure HYD-1** in order to reduce potential impacts to less than significant.

Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would also result in impacts on special-status riparian communities, including sycamore riparian woodland and coast live oak riparian forest due to realignment of the existing Trabuco Creek Trail. In addition, because the Partial Residential Development Alternative (Market Rate Housing) would develop the entire 4.6-acre portion of the project site between Trabuco Creek and Camino Capistrano with residential uses, implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in additional impacts to riparian habitat along the tributary to Trabuco Creek that exists in this area. Accordingly, **Mitigation Measure BIO-9**, which requires the project Applicant to obtain the appropriate permits to impact areas within the jurisdiction for Trabuco Creek and its tributaries, would remain applicable to the Partial Residential Development Alternative (Market Rate Housing). With implementation of **Mitigation Measure BIO-9**, potential impacts associated with the loss of riparian woodland communities would be reduced to less than significant, similar to the proposed project. The Partial Residential Development Alternative (Market Rate Housing) would also result in the loss of Mexican elderberry woodland, similar to the proposed project. However, similar to the proposed project, this loss would not be considered a substantial adverse effect because the amount of habitat loss would be limited

compared to the amount available in the project region. Impacts would be less than significant, similar to the proposed project.

Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) could also result in impacts on waters under the jurisdiction of the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). Implementation of **Mitigation Measure BIO-9** and through the existing Section 404 permit, Section 401 Water Quality Certification, and Section 1602 Streambed Alteration Agreement regulatory process, would ensure that implementation of the Partial Residential Development Alternative (Market Rate Housing) would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant with mitigation incorporated, similar to the proposed project.

Construction of the Partial Residential Development Alternative (Market Rate Housing) would also result in indirect effects that could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of construction and then re-establish these functions once all temporary construction effects have been removed, similar to the proposed project. In addition, the Partial Residential Development Alternative (Market Rate Housing) would implement **Mitigation Measures BIO-14**, **BIO-16**, and **BIO-17**, similar to the proposed project, that would reduce these impacts to less than significant. Following construction of the Partial Residential Development Alternative (Market Rate Housing), there is potential for increased long-term indirect effects to wildlife movement within Trabuco Creek due to increased noise, lighting, and other anthropogenic disturbance from operation of the alternative, similar to the proposed project. However, the implementation of **Mitigation Measures BIO-7, BIO-8, BIO-10, BIO-11, BIO-12, BIO-13,** and **BIO-15,** would reduce these impacts to less than significant, similar to the proposed project.

The Partial Residential Development Alternative (Market Rate Housing) would also be required to implement **Mitigation Measures BIO-7** and **BIO-9** in order to reduce potential impacts on the existing Trabuco Creek conservation covenant, similar to the proposed project, which would ensure that the alternative would not conflict with the provisions of an approved local, regional or State policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance. Lastly, implementation of **Mitigation Measures BIO-7** and **BIO-8** would ensure that the Partial Residential Development Alternative (Market Rate Housing) would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan, similar to the proposed project.

Overall, because the Partial Residential Development Alternative (Market Rate Housing) would develop the same area of the project site as the proposed project, impacts on biological resources associated with implementation of the Reduced Intensity Alternative would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Cultural Resources. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would include the preservation of the existing uses on the project site, including the Swanner House and Putuidem Village, and does not include any alterations to the Swanner House, Swanner House property, or the reproduction of a local Native American village. Therefore, implementation of the Partial Residential Development Alternative (Market Rate Housing) would not cause a substantial adverse change in the significance of a historical resource as defined in *State CEQA Guidelines* Section 15064.5 or a known, unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5.

However, implementation of the Partial Residential Development Alternative (Market Rate Housing) would include ground disturbing activities similar to the proposed project, including grading and excavation, which has the potential to unearth previously unknown archaeological deposits or resources, resulting in a potential substantial adverse change in the significance of a unique archaeological resource, as defined in *State CEQA Guidelines* Section 15064.5. Therefore, construction of the Partial Residential Development Alternative (Market Rate Housing) would be required to adhere to **Regulatory Compliance Measure CUL-1**, similar to the proposed project, which requires monitoring by both a qualified archaeologist and a Native American monitor and includes procedures for recovering any significant or unique archaeological resource and for preparation of a report that documents any cultural resource recovery at the project site, consistent with CCR Section 15064.5(e), Health & Safety Code Section 7050.5, and City Council Policy 601.

In addition, as discussed further below, the Partial Residential Development Alternative (Market Rate Housing) would be required to implement **Mitigation Measures TCR-1** and **TCR-2**, which require Native American monitoring of all grading and trenching activities and the identification of a centralized repatriation and reburial area within the project site. These measures would ensure that the Partial Residential Development Alternative (Market Rate Housing) would not result in significant impacts on tribal cultural resources, similar to the proposed project.

Therefore, with adherence to **Regulatory Compliance Measure CUL-1** and implementation of **Mitigation Measures TCR-1** and **TCR-2,** implementation of the Partial Residential Development Alternative (Market Rate Housing) would not cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5, and impacts would be less than significant with mitigation incorporated.

Overall, impacts on cultural resources associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Energy. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because of the inclusion of residential uses, the Partial Residential Development Alternative (Market Rate Housing) would result in an increase in the amount of energy used during construction and operation of the alternative compared to the proposed project.

Although implementation of the Partial Residential Development Alternative (Market Rate Housing) would require a slight increase in energy use during construction and operation, energy use during construction, including fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles, would also be expected to have a negligible effect on local and regional energy supplies, similar to the proposed project. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Orange County's overall use of the State's available energy resources because, similar to the proposed project, no unusual characteristics of the Partial Residential Development Alternative (Market Rate Housing) would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would also utilize construction equipment that meets Tier 3 emissions standards or higher, which would ensure fuel efficiency. Assuming the use of Tier 3 construction equipment is conservative as construction contractors would utilize Tier 4 equipment when feasible. Additionally, construction equipment and trucks would comply with CARB's anti-idling regulations, including the In-Use Off-Road Diesel-Fueled Fleets regulation, which would result in efficient use of construction-related energy and reduce fuel consumption, and on-road vehicles, such as haul trucks and worker vehicles, would be subject to federal fuel efficiency requirements. For these reasons, construction of the Partial Residential Development Alternative (Market Rate Housing) would not cause wasteful, inefficient, or unnecessary consumption of energy resources during construction, similar to the proposed project, and impacts would be less than significant.

Energy use associated with operation of the Partial Residential Development Alternative (Market Rate Housing) would be slightly greater than operation of the proposed project and would consist of natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. However, due to the inclusion of 138 residential units, implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in additional vehicle trips to and from the project site and a corresponding increase in fuel use compared to the proposed project. However, as discussed further below, the Partial Residential Development Alternative (Market Rate Housing) would also be required to implement **Mitigation Measure TRA-1**, which requires implementation of several VMT reduction measures, which would reduce fuel consumption associated with vehicle travel. Therefore, operation of the Partial Residential Development

Alternative (Market Rate Housing) is not expected to result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources and impacts would be less than significant, similar to the proposed project.

Overall, because the Partial Residential Development Alternative (Market Rate Housing) would result in residential uses at the project site, impacts related to energy use associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be slightly greater than the proposed project. Nevertheless, impacts would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Geology and Soils. The Partial Residential Development Alternative (Market Rate Housing) would develop the same project site as the proposed project and would therefore be subject to the same geologic and soil conditions as the proposed project. Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) could experience very strong seismically related ground shaking during the anticipated operational life of the alternative. Therefore, similar to the proposed project, all future construction and development on the project site would comply with applicable provisions of the CBC and the City's building regulations in effect at the time when building permit applications are submitted. In addition, **Regulatory Compliance Measure GEO-1,** which requires the implementation project-specific design and construction recommendations detailed in the Geotechnical Investigation, would be applicable to the Partial Residential Development Alternative (Market Rate Housing). Proper engineering design and construction in compliance with the CBC standards and the recommendations in the Geotechnical Investigation would address potential impacts related to seismic ground shaking. In addition, similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would implement remediation measures related to the proposed pedestrian bridge foundations and any structures developed in the 4.6-acre area between Trabuco Creek and Camino Capistrano to address potential liquefaction and post-liquefaction ground deformations and seismic settlement impacts, as required by **Regulatory Compliance Measure GEO-1**. Adherence to **Regulatory Compliance Measure GEO-1** would also ensure that the artificial fills and alluvial soils present in the upper several feet of the 4.6-acre area between Trabuco Creek and Camino Capistrano would be removed and recompacted in order to provide uniform soils characteristics, foundation slab, pavement, and flatwork for the residential buildings. Therefore, compliance with applicable provisions of the CBC and the City's building regulations and adherence to **Regulatory Compliance Measure GEO-1** would ensure that impacts related to being located on expansive soil would not be significant.

Construction of the Partial Residential Development Alternative (Market Rate Housing) at the project site would disturb surface soils and make them susceptible to erosion from wind and water and operation would increase the amount of impervious surface area on the project site, similar to the proposed project. An increase in impervious surface area increases the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters. However, **Regulatory Compliance Measures HYD-1, HYD-2,** and **HYD-3**, which require compliance with NPDES permit and City Municipal Code requirements and implementation of construction and operational water quality Best Management Practices (BMPs), and **Mitigation Measure HYD-1**,

which requirements implementation of specific equestrian-related BMPs, would be applicable to the Partial Residential Development Alternative (Market Rate Housing). Therefore, similar to the proposed project, with adherence to **Regulatory Compliance Measures HYD-1** through **HYD-3**, potential impacts related to soil erosion or loss of topsoil with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be **less than significant**, and no mitigation is required.

Therefore, with adherence to **Regulatory Compliance Measures GEO-1** and **HYD-1** through **HYD-3,** impacts related to geology and soils with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be **less than significant**, and no mitigation would be required.

Overall, impacts related to geology and soils associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Greenhouse Gas Emissions. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because the Partial Residential Development Alternative (Market Rate Housing) would include the construction of 138 market rate housing units at the project site, the Partial Residential Development Alternative (Market Rate Housing) would result in a greater amount of GHG emitted during construction and operation of the alternative.

Similar to the proposed project, construction activities associated with the Partial Residential Development Alternative (Market Rate Housing) would produce combustion emissions from various sources. In addition, long-term GHG emissions associated with the Partial Residential Development Alternative (Market Rate Housing) would be generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption (e.g., off-site utility providers), waste sources (e.g., land filling and waste disposal), and water sources (e.g., water supply and conveyance, treatment, and distribution). However, construction and operational GHG emissions associated with the Partial Residential Development Alternative (Market Rate Housing) would be expected to be similar, or slightly greater, to the proposed project. Accordingly, GHG emissions associated with construction and operation of the Partial Residential Development Alternative (Market Rate Housing) are not expected to exceed the SCAQMD threshold of 3,000 MT CO_2e/yr, similar to the proposed project. Therefore, implementation of the Partial Residential Development Alternative (Market Rate Housing) would not have the potential to generate significant GHG emissions that would have a significant effect on the environment and impacts would be less than significant, similar to the proposed project.

In addition, similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would be required to comply with the latest Title 24 and CALGreen Code standards regarding energy conservation requirements as well as measures to reduce wastewater and water use. Further, with implementation of the VMT reduction strategies specified in **Mitigation Measure TRA-1** and the addition of EV charging stations, the Reduced Intensity Alternative would not conflict with the identified transportation and motor vehicle measures contained in the California Air Resources Board (CARB) 2022 Scoping Plan, similar to the proposed project. Therefore, implementation of the Partial Residential Development Alternative (Market Rate Housing) would not conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant, similar to the proposed project.

Overall, impacts related to GHG emissions associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would generally be the same or slightly greater than the proposed project. Impacts would be similarly **less than significant with mitigation incorporated**. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Hazards and Hazardous Materials. The Partial Residential Development Alternative (Market Rate Housing) would develop the same project site as the proposed project and would therefore be subject to the same hazardous conditions as the proposed project. As described in Section 4.8, Hazardous and Hazardous Materials, hazardous conditions at the project site include two 250-gallon underground storage tanks (USTs) containing gasoline, an aboveground storage tank (AST) containing diesel, an AST containing herbicide, approximately 150 cubic yards of diesel and waste oil contaminated soil, a 55-gallon steel drum containing unknown material, and potential contamination associated with the agricultural uses at the project site.

In addition, as the Partial Residential Development Alternative (Market Rate Housing) includes the demolition of the existing barn located on the eastern portion of the project site, similar to the proposed project, implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in similar impacts related to the potential presence of ACMs and LBPs on an existing structure to be demolished as the proposed project. Based on the identification of the hazardous environmental issues identified above, the Partial Residential Development Alternative (Market Rate Housing) would also be required to implement **Mitigation Measure HAZ-1** requiring implementation of the recommendations detailed in the Phase I ESA including preparation of Phase II ESA.

As discussed in Section 4.8, Hazards and Hazardous Materials, a Phase II ESA was subsequently prepared and determined that the identified hazardous conditions at the project site do not represent a significant hazard to the public or the environment. Therefore, based on the above analysis and the site investigations performed as part of the Phase I ESA and Phase III ESA, implementation of the Partial Residential Development Alternative (Market Rate Housing) would not 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 with implementation of the remaining provisions of **Mitigation Measure HAZ-1**, similar to the proposed project.

Further, similar to the proposed project, small quantities of common hazardous materials would be used at the project site during construction and operation of the proposed project. Improper use, storage, or handling could result in the release of hazardous materials into the environment which could pose a risk to construction workers and the public. However, similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would be required to comply with existing government regulations in the use and disposal of these materials, and such materials would not be used in sufficient strength or quantity to create a substantial risk to human or environmental health.

Therefore, with implementation of **Mitigation Measure HAZ-1,** impacts related to hazards and hazardous materials with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be **less than significant with mitigation incorporated**. The level of impact associated with this issue would remain the same under Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Hydrology and Water Quality. The Partial Residential Development Alternative (Market Rate Housing) would develop the same project site as the proposed project and would therefore be subject to the same hydrological conditions as the proposed project.

Construction activities associated with the Partial Residential Development Alternative (Market Rate Housing) would be similar to the proposed project and would result in similar pollutants of concern. The Partial Residential Development Alternative (Market Rate Housing) would also be subject to the requirements of the Construction General Permit and City's Municipal Code Sections 8-2.15, 8-2.16, and 8-14.107, which require preparation of a pollution control plan, construction BMP plan, and/or erosion and sediment control plan, similar to the proposed project and specified in **Regulatory Compliance Measure HYD-1** and **Regulatory Compliance Measure HYD-2**.

Operation of the Partial Residential Development Alternative (Market Rate Housing) would be similar to the proposed project; however, due to the development of the entire 4.6-acre portion of the project site between Trabuco Creek and Camino Capistrano with residential uses, implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in more impervious surface area at the project site than the proposed project. Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would also be required to adhere to the San Diego RWQCB's Regional MS4 Permit. Accordingly, **Regulatory Compliance Measure HYD-3** would be applicable to the Partial Residential Development Alternative (Market Rate Housing) and a Final WQMP specifying the Site Design, Source Control, and LID BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff would be prepared and implemented. In addition, **Regulatory Compliance Measure HYD-4**, which requires preparation of a Final Hydrology and Hydraulics Analysis to confirm that the proposed on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the capacity of downstream storm drain facilities is not exceeded, would also be applicable to the Reduced Intensity Alternative, similar to the proposed project. Adherence with **Regulatory Compliance Measures HYD-1** through **HYD-4** would ensure that potential impacts associated with changes in the drainage pattern at the project site during construction and operation, including erosion and siltation, flooding on or off site, and increased runoff, and conflict with or obstruction of a water

quality control plan or sustainable groundwater management plan would also be less than significant.

The Partial Residential Development Alternative (Market Rate Housing) also includes the same Equestrian Core proposed under the proposed project that would support equine activities similar to the proposed project. Although horse waste, such as manure, urine and soiled bedding, are organic, biodegradable materials, many of their physical, biological, and chemical properties, including sediment, phosphorous, nutrients, and bacteria, can be detrimental to water quality and can adversely affect human health and aquatic life in water bodies. Accordingly, the Partial Residential Development Alternative (Market Rate Housing) would also be required to properly manage proposed equestrian activities, similar to the proposed project, including proper management of horse waste, in order to prevent associated pollutants from entering the stormwater system and downstream receiving waters, consistent with the equestrian-related water quality BMPs provided by the Orange County Public Works Department[5] and specified in **Mitigation Measure HYD-1.** Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would be required to implement **Mitigation Measure HYD-1** to reduce potential water quality impacts associated with equestrian uses.

In addition, construction and operation of the Partial Residential Development Alternative (Market Rate Housing) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin as no construction or operational groundwater dewatering would be required. However, water demand associated with the Partial Residential Development Alternative (Market Rate Housing) would be greater than proposed project due to the 138 residential uses. Similar to the proposed project, water service for the Partial Residential Development Alternative (Market Rate Housing) would be provided by the SMWD. Although the SMWD's 2020 UWMP indicates that SMWD's water supplies are projected to meet full-service demands now and into the future year 2050 during normal years, single dry year, and multiple dry years, these determinations are based on, in part, on the water demand associated with full buildout of the City's General Plan. Because the project site is not currently designated for residential development, water demand associated with development of residential uses in this area was not considered as part of SMWD's 2020 UWMP. A Water Supply Assessment (WSA) would likely be needed in order to determine if sufficient water supplies exist. However, because the SMWD supplies water from a variety of sources and would manage the groundwater basin in order to ensure that overdraft would not occur, implementation of the Partial Residential Development Alternative (Market Rate Housing) is not expected to substantially deplete groundwater supplies.

With adherence to **Regulatory Compliance Measures HYD-1** through **HYD-3** and implementation of **Mitigation Measure HYD-1**, impacts related to hydrology and water quality with implementation of the Reduced Intensity Alternative would be **less than significant with mitigation incorporated**.

Overall, impacts related to hydrology and water quality associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would generally be similar to the proposed project. Impacts would be similarly **less than significant with mitigation incorporated**.

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5 Orange County Public Works. 2004. *Equestrian-Related Water Quality Best Management Practices.* June.

The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Noise. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project.

Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would be required to adhere to construction hour limits in Section 9-3.531(d)(4) of the City Municipal Code, as specified in **Regulatory Compliance Measure NOI-1**, to ensure construction noise impacts would be less than significant. In addition, similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) construction vibration impacts are also expected to be less than significant.

Operational noise associated with the Partial Residential Development Alternative (Market Rate Housing) would also be similar to the proposed project, including noise associated with traffic and stationary sources (i.e., Trails/Natural Core activities, spectator activity in the Equestrian Core, agricultural activity in the Agricultural Core, and HVAC equipment). However, due to the construction of 138 residential units within the 4.6-acre portion of the project site between Trabuco Creek and Camino Capistrano, noise in this area during operation of the Partial Residential Development Alternative (Market Rate Housing) is expected to be slightly greater than operation of the proposed project. However, there are no noise sensitive uses in this area that could be impacted by this slight increase in operation noise. As discussed in Section 4.10, Noise, all long-term operational noise associated with the proposed project would be less than significant or reduced to less than significant with adherence to **Regulatory Compliance Measure NOI-2** and implementation of **Mitigation Measures NOI-1** and **NOI-2. Regulatory Compliance Measure NOI-2** would limit agricultural operations between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday pursuant to Section 9-3.531(d)(6) of the City Municipal Code, **Mitigation Measure NOI-1** requires an acoustical study be prepared to confirm HVAC noise would be in compliance with the City exterior noise standards, and **Mitigation Measure NOI-2** requires an acoustical study consisting of noise monitoring during three (3) peak activity weekends be prepared once the project is in operation to confirm compliance with the City exterior noise standards. The Partial Residential Development Alternative (Market Rate Housing) would also be required to adhere to **Regulatory Compliance Measure NOI-2** and implement **Mitigation Measures NOI-1** and **NOI-2**. Therefore, operational noise impacts would also be less than significant, similar to the proposed project. Further, the Partial Residential Development Alternative (Market Rate Housing) would not generate vibration during operation, similar to the proposed project.

Therefore, with adherence to **Regulatory Compliance Measures NOI-1** and **NOI-2** and implementation of **Mitigation Measures NOI-1** and **NOI-2**, noise impacts with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be **less than significant with mitigation incorporated**.

Overall, although the Partial Residential Development Alternative (Market Rate Housing) would result in a slight increase in operational noise, noise impacts associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would generally be similar to the proposed project. Impacts would be similarly **less than significant with mitigation incorporated**. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Transportation. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project. Because the Partial Residential Development Alternative (Market Rate Housing) would include the construction of 138 market rate housing units at the project site, the Partial Residential Development Alternative (Market Rate Housing) would result in a greater number of vehicle trips to and from the project site during operation.

Similar to the proposed project, construction equipment and vehicles would be staged on-site. Although the Partial Residential Development Alternative (Market Rate Housing) does not include any characteristics (e.g., permanent road closure or long-term blocking of road access) that would physically impair or otherwise interfere with transit, roadways, bicycle facilities, and/or pedestrian facilities in the project vicinity, construction activities may require temporary lane or road closures on Camino Capistrano. However, similar to the proposed project, as required by the NWOS Specific Plan, and consistent with best construction site management practices, the Partial Residential Development Alternative (Market Rate Housing) would implement a construction worksite traffic control plan during construction activities that complies with applicable engineering standards outlined in the Caltrans' California Manual of Uniform Traffic Control Devices,[6] ensuring that construction activities which may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Therefore, construction of the Partial Residential Development Alternative (Market Rate Housing) would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities during construction, similar to the proposed project.

Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would be required to comply with General Plan policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The Partial Residential Development Alternative (Market Rate Housing) would also be required to comply with City Administrative Policy No. 310, which establishes metrics for determining traffic impacts, consistent transportation-related goals and policies in the City's General Plan, and the Orange County CMP.

[6] California Department of Transportation (Caltrans). 2014. *California Manual on Uniform Traffic Control Devices* (CA MUTCD). Revised April 1, 2025.

Consistent with applicable goals and policies contained in the City's General Plan, the inclusion of new pedestrian paths and trail connections under the Reduced Intensity Alternative, as well as the end-of-trip bicycle facilities required by **Mitigation Measure TRA-1,** would help to enhance the City's bicycle, pedestrian, and equestrian trails network (Circulation Element Goal 3 and Environmental Justice Element Goal 11). In addition, similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) does not propose any improvements or alterations to the existing sidewalk and bicycle network in the vicinity of the project site. Proposed pedestrian paths and trails would connect to the existing pedestrian network and the Partial Residential Development Alternative (Market Rate Housing) would allow for the continuation of existing on-street (Class II) bicycle lanes provided on both sides of Camino Capistrano, the off-street bike path (Class I) provided on the east side of Rancho Viejo Road, and the on-street (Class II) bicycle lane provided on the north side of the segment of Junipero Serra Road between Camino Capistrano and the I-5 southbound off-ramp. Accordingly, the Partial Residential Development Alternative (Market Rate Housing) would be consistent with the City's goals of providing a circulation system that meets the needs of the community and minimizing conflict between vehicles, pedestrians, equestrians, and bicycles (Circulation Element Goals 1 and 4 and Environmental Justice Element Goals 4 and 12), similar to the proposed project. Therefore, similar to the proposed project, the Reduced Intensity Alternative would not conflict with applicable provisions in the City's General Plan Circulation Element.

In addition, because the Partial Residential Development Alternative (Market Rate Housing) would result in a similar significant impact related to VMT, even with implementation of VMT reduction measures as required by **Mitigation Measure TRA-1** and discussed below, implementation of the Partial Residential Development Alternative (Market Rate Housing) would also result in conflicts with City Administrative Policy No. 310, similar to the proposed project. Further, due to the distance from the project site to the only CMP intersection in the city (Ortega Highway/Interstate 5 (I-5) ramp) and because the intersection does not provide direct regional access to the project site, the Partial Residential Development Alternative (Market Rate Housing) is not expected to result in any impacts to this intersection would, therefore, not result in conflicts with the Orange County CMP, similar to the proposed project.

As discussed above, because the Partial Residential Development Alternative (Market Rate Housing) would include the construction of 138 market rate housing units at the project site, the Partial Residential Development Alternative (Market Rate Housing) would result in a greater number of vehicle trips to and from the project site during operation. The Orange County Transportation Analysis Model (OCTAM), Version 5.1 relies on Traffic Analysis Zones (TAZ) for VMT analysis, which include socioeconomic data for areas within the County, including the City. According to the OCTAM TAZ for the project site, the project site is located in a TAZ that is considered housing poor. Therefore, although the Partial Residential Development Alternative (Market Rate Housing) would result in a greater number of vehicle trips to and from the project site during operation, because the project site is in an housing poor area and would develop residential uses that would be in close proximity to the proposed amenities that would be developed on the remainder of the project site, VMT associated with the Partial Residential Development Alternative (Market Rate Housing) would likely be less than the proposed project. **Mitigation Measure TRA-1** would remain applicable to the Reduced Intensity Alternative and the VMT reduction measures detailed in **Mitigation Measure**

TRA-1, including the provision of end-of-trip bicycle facilities and the implementation of an employer-sponsored vanpool, would be incorporated into the alternative. However, similar to the proposed project it cannot be guaranteed that employees would use these provided facilities, and the use of these provided facilities cannot be enforced or monitored. Therefore, because no alternative-specific VMT analysis has been conducted for the Partial Residential Development Alternative (Market Rate Housing) and the VMT reduction provided by the VMT reduction measures detailed in **Mitigation Measure TRA-1** may not be achieved, impacts would continue to be **significant and unavoidable**, similar to the proposed project. Therefore, implementation of the Partial Residential Development Alternative (Market Rate Housing) would conflict or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b), and impacts would be significant and unavoidable, similar to the proposed project.

Overall, although the Partial Residential Development Alternative (Market Rate Housing) would likely result in less VMT than the proposed project, impacts would be similarly **significant and unavoidable**. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Tribal Cultural Resources. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. All other cores, including the Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, and Trails/Natural Core, would be the same as proposed under the proposed project.

Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would include the preservation of the existing uses on the project site, including the Putuidem Village, and does not include any alterations to the site. Accordingly, the Partial Residential Development Alternative (Market Rate Housing) would be designed to avoid known tribal cultural resources at the project site, similar to the proposed project. In addition, as discussed above, construction of the Partial Residential Development Alternative (Market Rate Housing) would be required to adhere to **Regulatory Compliance Measure CUL-1**, which details provisions in the event that unknown cultural resources are discovered during ground-disturbing construction activities, and **Regulatory Compliance Measure CUL-2**, which details provisions for if human remains are encountered at the project site. Adherence to these measures would ensure that potential impacts to previously unknown cultural resources, including tribal cultural resources and human remains, would be less than significant.

In addition, the Partial Residential Development Alternative (Market Rate Housing) would also be required to implement the requests from the Juaneño Band of Mission Indians Acjachemen Nation provided during tribal consultation, including Native American monitoring of all grading and trenching activities and the identification of a centralized repatriation and reburial area within the project site, as detailed in **Mitigation Measures TCR-1** and **TCR-2**.

Therefore, with adherence to **Regulatory Compliance Measures CUL-1** and **CUL-2** and implementation of **Mitigation Measures TCR-1** and **TCR-2**, impacts related to tribal cultural

resources with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be **less than significant with mitigation incorporated**.

Overall, impacts on tribal cultural resources associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would generally be similar to the proposed project. Impacts would be similarly **less than significant with incorporation of mitigation**. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Utilities and Service Systems. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. Specifically, the Partial Residential Development Alternative (Market Rate Housing) would develop 138 market rate housing units at the project site. Similar to the proposed project, the Partial Residential Development Alternative (Market Rate Housing) would connect to existing utility infrastructure in the vicinity of the project site and would include similar utility infrastructure improvements. However, due to the construction of the 138 residential units, the Partial Residential Development Alternative (Market Rate Housing) would result in an increase in utility demand compared to the proposed project, including water, wastewater, stormwater, electricity, natural gas, and telecommunications. However, implementation of the Reduced Intensity Alternative is not expected to require, nor would it result in, the construction of new utilities facilities or the expansion of existing facilities beyond those included in the Partial Residential Development Alternative (Market Rate Housing).

Similar to the proposed project, water service for the Partial Residential Development Alternative (Market Rate Housing) would be provided by the SMWD via an existing water service line located in Camino Capistrano. Although the SMWD's 2020 UWMP indicates that SMWD's water supplies are projected to meet full-service demands now and into the future year 2050 during normal years, single dry year, and multiple dry years, these determinations are based on, in part, on the water demand associated with full buildout of the City's General Plan. Because the project site is not currently designated for residential development, water demand associated with development of residential uses in this area was not considered as part of SMWD's 2020 UWMP. Accordingly, impacts related to water supply would be potentially significant and a WSA would likely be needed in order to determine if sufficient water supplies exist. Accordingly, impacts associated with water demand and supplies with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be considered **significant and unavoidable**.

Similar to the proposed project, wastewater service would be provided by the City's Wastewater Management Division via an existing 8-inch sewer main that is connected to the Moulton Niguel Water District's 12-inch trunk line located adjacent to the OCTA owned rail line. Based on the current treatment capacity of the J.B. Latham Treatment Plant, which would treat wastewater flows from the project site, the J.B. Latham Treatment Plant would have adequate capacity to accommodate the wastewater flow from the Partial Residential Development Alternative (Market Rate Housing), similar to the proposed project. In addition, the Applicant would prepare a Water and Sewer Master Plan as part of project implementation, which would be reviewed by the SMWD

to ensure sufficient capacity exists. Impacts on wastewater service would be **less than significant**, similar to the proposed project.

As previously discussed, energy suppliers would have enough electricity and natural gas to adequately serve the Partial Residential Development Alternative (Market Rate Housing) once it is developed and operational. Further, ongoing operational communication needs would be met through existing cellular and wireless networks, which are already available in the vicinity of the project site and are widely used for routine business, personal, and emergency communications. In addition, employees and visitors would be expected to primarily rely on personal mobile devices for voice, data, and internet access, consistent with current conditions. Impacts related to electrical and natural gas service would be **less than significant**, similar to the proposed project.

In addition, the operational stormwater infrastructure associated with the Partial Residential Development Alternative (Market Rate Housing) would be adequately designed to retain the DCV of stormwater runoff for the project site, pursuant to the Regional MS4 Permit, and would accommodate Regional MS4 Permit hydromodification requirements. Lastly, based on the current available capacity at the Prima Deshecha Landfill, the proposed project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs. Impacts related to stormwater and solid waste would be **less than significant**, similar to the proposed project.

Overall, the Partial Residential Development Alternative (Market Rate Housing) would result in an overall increase in utility demand and could result in significant impacts related to water demand and supply. Impacts on utilities and service systems associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would therefore be **significant and unavoidable**, and greater than the proposed project. The level of impact associated with this issue would be greater under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

Wildfire. The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with similar types of uses as the proposed project, but would replace the Community Building Core with residential uses. The Partial Residential Development Alternative (Market Rate Housing) would also include similar vehicle access and circulation improvements to the project site. Construction of these roadway and utility improvements may require road closures or detours in the immediate vicinity of the project site, including on Camino Capistrano, a designated emergency evacuation route, similar to the proposed project. Similar to the proposed project, the contractor would be required to implement a construction worksite traffic control plan that complies with applicable engineering standards outlined in the California Manual of Uniform Traffic Control Devices,[7] ensuring that construction activities, which may temporarily restrict vehicular traffic, would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Therefore, construction activities would not impact vehicle flow and the Partial Residential Development

[7] California Department of Transportation (Caltrans). 2014. *California Manual of Uniform Traffic Control Devices,* Federal Highway Administration's MUTCD 2009 Edition, including Revision 1, 2, & 3 as amended for use in California, 14th Editions, Revision 9.

Alternative (Market Rate Housing) would not physically impair or interfere with emergency response or evacuation in the project vicinity, similar to the proposed project.

In addition, because all circulation improvements would be constructed in accordance with applicable standards associated with vehicular access, resulting in the provision of adequate emergency access and evacuation, operation of the Partial Residential Development Alternative (Market Rate Housing) would not interfere with emergency access to and from the project site. Similar to the proposed project, the design of the Partial Residential Development Alternative (Market Rate Housing) would be submitted for review and approval by the OCFA, which provides fire and emergency medical services in the city, and the Orange County Sheriff's Department, which provides primary law enforcement services for the city, prior to the issuance of building permits in order to ensure development would not interfere with the City's Emergency Management framework. In addition, because the Partial Residential Development Alternative (Market Rate Housing) would not result in any permanent alterations to Camino Capistrano or I-5, the Reduced Intensity Alternative would not disrupt evacuation via Camino Capistrano and I-5 in the event of an emergency and adherence to the emergency access measures required by the City would ensure that potential impacts related to physical interference with an adopted emergency response plan or emergency evacuation plan would be less than significant, similar to the proposed project.

The Partial Residential Development Alternative (Market Rate Housing) would also be required to adhere to applicable City building and fire codes as part of development and would be developed consistent with General Plan's wildfire policies, including Safety Element Policy 1.6 requiring reducing the risk of wildfire hazards by requiring fuel modification for landscaping and defensible space in areas most at risk of wildfire, similar to the proposed project. By complying with these regulations, implementation of the Partial Residential Development Alternative (Market Rate Housing) would reduce wildfire risks, reduce potential wildfire associated pollutant concentrations, and help prevent the uncontrolled spread of a wildfire. Impacts would be less than significant, similar to the proposed project, and no mitigation is required. Further, the installation of all utility improvements would be implemented in accordance with the current California Building Code, California Fire Code, and applicable local ordinances, and impacts related to the installation or maintenance of infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment would be less than significant, similar to the proposed project.

In addition, because the Partial Residential Development Alternative (Market Rate Housing) would be developed on the same site as the proposed project, impacts related to landslides and flooding would be less than significant, similar to the proposed project.

Overall, because the Partial Residential Development Alternative (Market Rate Housing) would develop the same site as the proposed project, impacts related to wildfire associated with implementation of the Partial Residential Development Alternative (Market Rate Housing) would generally be similar to the proposed project. Impacts would be similarly **less than significant**, and no mitigation measures are required. The level of impact associated with this issue would remain the same under the Partial Residential Development Alternative (Market Rate Housing) compared to the proposed project.

5.5.3.3 Attainment of Project Objectives

The Partial Residential Development Alternative (Market Rate Housing) would generally meet the underlying purpose of the proposed project and all of the project objectives, although to a lesser extent than the proposed project. The attainment of project objectives is discussed further below.

1. Develop a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities.

   The Partial Residential Development Alternative (Market Rate Housing) would develop the majority of the project site with the Legacy Ranch, which consists of a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities. Although the Community Building Core would be replaced with residential uses, this would not result in a reduction in the recreational and agricultural uses at the project site. Therefore, the Partial Residential Development Alternative (Market Rate Housing) would meet this project objective to a similar extent as the proposed project.

2. Preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance.

   The Partial Residential Development Alternative (Market Rate Housing) would preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance, similar to the proposed project. Therefore, the Partial Residential Development Alternative (Market Rate Housing) would meet this project objective to a similar extent as the proposed project.

3. Promote sustainable agricultural practices through orchards, row crops, and farm-related educational programs.

   The Partial Residential Development Alternative (Market Rate Housing) would develop the project site with new sustainable agricultural uses such as orchards, row crops, and farm-related educational programs, similar to the proposed project. Therefore, the Reduced Intensity Alternative would meet this project objective to a similar extent as the proposed project.

4. Provide diverse community amenities, including equestrian facilities and event spaces, to attract residents and visitors.

   The Partial Residential Development Alternative (Market Rate Housing) would develop the project site with new community amenities, including equestrian facilities and event spaces. However, because the Community Building Core would be replaced with residential uses, implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in a reduction in the total amount of event spaces at the project site. Therefore, although the Partial Residential Development Alternative (Market Rate Housing) would meet this project objective, it would not satisfy this objective to the same extent as the proposed project.

5. Enhance connectivity through trails and pedestrian infrastructure, integrating with the existing Trabuco Creek Trail.

   The Partial Residential Development Alternative (Market Rate Housing) would develop the project site with new trail improvements and connections, similar to the proposed project. Therefore, the Partial Residential Development Alternative (Market Rate Housing) would meet this project objective to a similar extent as the proposed project.

6. Support local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment.

   The Partial Residential Development Alternative (Market Rate Housing) would develop the project site with new uses that would support local economic growth, including retail farm stands and conditional event-based uses, such as weddings and live entertainment. However, because the Community Building Core would be replaced with residential uses, implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in a reduction in the total amount of event spaces at the project site. Therefore, although the Partial Residential Development Alternative (Market Rate Housing) would meet this project objective, it would not satisfy this objective to the same extent as the proposed project.

7. Ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant.

   The Partial Residential Development Alternative (Market Rate Housing) would be constructed to ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant, similar to the proposed project. Therefore, the Partial Residential Development Alternative (Market Rate Housing) would meet this project objective to a similar extent as the proposed project.

5.6 COMPARISON OF ALTERNATIVES AND IDENTIFICATION OF THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE

5.6.1 Alternatives Summary Comparison of Impacts and Ability to Meet Project Objectives

Table 5.A: Proposed Project and Project Alternatives Impact Comparison, below, identifies the level of impact for the proposed project and each alternative (e.g., no impact, less than significant impact, less than significant impact with mitigation, significant and unavoidable impact, or significant and unavoidable impact with mitigation) and whether the impact of the alternative would be the same as, less than, or greater than the proposed project impacts. In some cases, the proposed project and alternative would result in the same significance determination, but the degree of that impact with the alternative might be less than or greater than the proposed project.

Table 5.A: Proposed Project and Project Alternatives Impact Comparison

Impacts	Proposed Project	No Project Alternative	Reduced Intensity Alternative	Partial Residential Development Alternative (Market Rate Housing)
4.1: AESTHETICS				
Threshold 4.1.1: Would the project have a substantial adverse effect on a scenic vista?	LTS	NI <	LTS =	LTS >
4.2: AIR QUALITY				
Threshold 4.2.1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	LTS	NI <	LTS <	LTS >
Threshold 4.2.2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	LTS	NI <	LTS <	LTS >
Threshold 4.2.3: Would the project expose sensitive receptors to substantial pollutant concentrations?	LTS	NI <	LTS <	LTS >
4.3: BIOLOGICAL RESOURCES				
Threshold 4.3.1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	LTSM	NI <	LTSM =	LTSM =
Threshold 4.3.2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	LTSM	NI <	LTSM =	LTSM >
Threshold 4.3.3: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?	LTSM	NI <	LTSM =	LTSM >
Threshold 4.3.4: Would the project create substantial interference 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?	LTSM	NI <	LTSM =	LTSM =
Threshold 4.3.5: Would the project conflict with the provisions of an approved local, regional or State policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance?	LTSM	NI <	LTSM =	LTSM =
Threshold 4.3.6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	LTSM	NI <	LTSM =	LTSM =
4.4: CULTURAL RESOURCES				

Table 5.A: Proposed Project and Project Alternatives Impact Comparison

Impacts	Proposed Project	No Project Alternative	Reduced Intensity Alternative	Partial Residential Development Alternative (Market Rate Housing)
Threshold 4.4.1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5?	NI	NI =	NI =	NI =
Threshold 4.4.2: Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to State CEQA Guidelines Section 15064.5?	LTSM	NI <	LTSM =	LTSM =
Threshold 4.4.3: Would the project disturb any human remains, including those interred outside of formal cemeteries?	LTSM	NI <	LTSM =	LTSM =
4.5: ENERGY				
Threshold 4.5.1: Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	LTS	NI <	LTS <	LTS >
4.6: GEOLOGY AND SOILS				
Threshold 4.6.1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (ii) Strong seismic ground shaking? (iii) Seismic-related ground failure, including liquefaction?	LTS	NI <	LTS =	LTS =
Threshold 4.6.2: Would the project result in substantial soil erosion or the loss of topsoil?	LTS	NI <	LTS =	LTS =
Threshold 4.6.3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?	LTS	NI <	LTS =	LTS =
Threshold 4.6.4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?	LTS	NI <	LTS =	LTS =
4.7: GREENHOUSE GAS EMISSIONS				
Threshold 4.7.1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment?	LSTM	NI <	LTSM <	LTSM <
Threshold 4.7.2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	LSTM	NI <	LTSM =	LTSM =
4.8: HAZARDS AND HAZARDOUS MATERIALS				
Threshold 4.8.2: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	LSTM	NI <	LTSM =	LTSM =

Table 5.A: Proposed Project and Project Alternatives Impact Comparison

Impacts	Proposed Project	No Project Alternative	Reduced Intensity Alternative	Partial Residential Development Alternative (Market Rate Housing)
4.9: HYDROLOGY AND WATER QUALITY				
Threshold 4.9.1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	LTSM	NI <	LTS =	LTS =
Threshold 4.9.2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	LTS	NI <	LTS =	LTS =
Threshold 4.9.3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on or off site; (ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site; or (iii) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	LTSM	NI <	LTS <	LTS >
Threshold 4.9.5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	LTSM	NI <	LTS =	LTS =
4.10: NOISE				
Threshold 4.10.1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	LTSM	NI <	LTSM <	LTSM >
Threshold 4.10.2: Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?	LTS	NI <	LTS <	LTS >
4.11: TRANSPORTATION				
Threshold 4.6.1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	LTSM	NI <	LTSM =	LTSM =
Threshold 4.6.2: Would the project conflict or be inconsistent with State CEQA Guidelines Section 15064.3, subdivision (b)?	SU	NI <	SU <	SU <
4.12: TRIBAL CULTURAL RESOURCES				
Threshold 4.12.1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically	LTSM	NI <	LTSM =	LTSM =

Table 5.A: Proposed Project and Project Alternatives Impact Comparison

Impacts	Proposed Project	No Project Alternative	Reduced Intensity Alternative	Partial Residential Development Alternative (Market Rate Housing)
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: (i) listed or eligible for listing in the California Register, or in a local register of historical resources as defined in PRC Section 5020.1(k); or (ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.?				
4.13: UTILITIES AND SERVICE SYSTEMS				
Threshold 4.13.1: Would the project require or result in the relocation or construction 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?	LTS	NI <	LTS <	LTS >
Threshold 4.13.2: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LTS	NI <	LTS <	SU >
Threshold 4.13.3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	LTS	NI <	LTS <	LTS >
Threshold 4.13.4: Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goal?	LTS	NI <	LTS <	LTS >

Source: LSA (2026).
NI = No Impact
LTS = Less Than Significant Impact
LTSM = Less Than Significant with Mitigation
SU = Significant and Unavoidable Impact (all SU impacts are shown in bold)
< (less than)
> (greater than)
= (equal to)

Table 5.B: Summary of Ability of the Proposed Project and Project Alternatives to Address Project Objectives

Project Objective	Proposed Project	No Project Alternative	Reduced Intensity Alternative	Partial Residential Development Alternative (Market Rate Housing)
1. Develop a mixed-use recreational and agricultural destination that enhances community access to active and passive recreational opportunities.	Yes	No	Yes <	Yes =
2. Preserve and integrate the historic Swanner House, Dr. Joe Cortese Dog Park, and Putuidem Village, respecting their cultural and historical significance.	Yes	No	Yes =	Yes =
3. Promote sustainable agricultural practices through orchards, row crops, and farm-related educational programs.	Yes	No	Yes =	Yes =
4. Provide diverse community amenities, including equestrian facilities, and event spaces, to attract residents and visitors.	Yes	No	Yes <	Yes <
5. Enhance connectivity through trails and pedestrian infrastructure, integrating with the existing Trabuco Creek Trail.	Yes	No	Yes =	Yes =
6. Support local economic growth by introducing retail farm stands and conditional event-based uses, such as weddings and live entertainment.	Yes	No	Yes <	Yes <
7. Ensure compliance with environmental regulations, including preservation of the 14-acre Trabuco Creek conservation covenant.	Yes	No	Yes =	Yes =

Source: LSA (2026).

5.6.2 Environmentally Superior Alternative

Implementation of the No Project Alternative would avoid all of the environmental impacts associated with the proposed project and would negate the need for mitigation. However, the No Project Alternative would not achieve any of the project objectives. In addition, *State CEQA Guidelines*, Section 15126.6(e)(2) states that "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

None of the alternatives considered would avoid the proposed project's significant and unavoidable VMT impact. Although implementation of the Partial Residential Development Alternative (Market Rate Housing) would result in a reduction in VMT, because no alternative-specific VMT analysis has been conducted for the Partial Residential Development Alternative (Market Rate Housing) and the VMT reduction provided by the VMT reduction measures detailed in **Mitigation Measure TRA-1** may not be achieved, impacts would continue to be **significant and unavoidable**, similar to the proposed project. In addition, because the project site is not currently designated for residential development and water demand associated with development of residential uses in this area was not considered as part of SMWD's 2020 UWMP, impacts related to water supply would be potentially significant and a WSA would likely be needed in order to determine if sufficient water supplies exist.

Accordingly, impacts associated with water demand and supplies with implementation of the Partial Residential Development Alternative (Market Rate Housing) would be considered **potentially significant**.

The Reduced Intensity Alternative would develop the project site with similar types of uses as the proposed project, but at a reduced intensity. Because the Reduced Intensity Alternative would result in a 40 percent reduction in the number of stalls for full-time boarding and therefore the overall intensity at the project site compared to the proposed project, environmental impacts associated with the development of the Reduced Intensity Alternative would be generally less than the impacts identified for the proposed project. Although the Reduced Intensity Alternative would also result in a significant and unavoidable impact related to VMT, implementation of this alternative would not introduce any new significant impacts. Accordingly, the Reduced Intensity Alternative is considered the environmentally superior alternative.

As discussed above, the Reduced Intensity Alternative would generally meet the underlying purpose of the proposed project and all of the project objectives, although to a lesser extent than the proposed project.

6.0 OTHER CEQA CONSIDERATIONS

As required by the California Environmental Quality Act (CEQA), this chapter discusses the following types of impacts that could result from implementation of the proposed Legacy Ranch Project (proposed project) and the conceptual development project: (1) growth-inducing impacts; (2) significant irreversible changes; (3) effects found not to be significant with implementation of standard conditions, regulatory compliance measures or mitigation measures; and (4) significant unavoidable effects.

6.1 GROWTH-INDUCING IMPACTS

As required by *State CEQA Guidelines* Section 15126.2(e), this section summarizes the project's potential growth-inducing impacts on the surrounding community. Pursuant to *State CEQA Guidelines* Section 15126.2(d), a project is typically considered growth-inducing if it would foster economic or population growth or the construction of additional housing; if it would remove obstacles to population growth or tax community services to the extent that the construction of new facilities would be necessary; or if it would encourage or facilitate other activities that cause significant environmental effects. Examples of projects likely to have significant growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or industrial parks in areas that are currently only sparsely developed or are undeveloped. This section summarizes the project's potential growth-inducing impacts on the surrounding community.

As described in the Initial Study (**Appendix B**), the project site is located in an urbanized area of the City of San Juan Capistrano (City), adjacent to existing development, that is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, natural gas, and telecommunications infrastructure. The proposed project would include the installation of on-site and utilities and connections to these existing utility lines and would not include the construction or new or expanded utility infrastructure. In addition, these connections would be sized to only serve the proposed project and would not expand infrastructure in a way that would serve any other potential new development. Therefore, no major utility line constructions or extensions would occur that would foster population growth.

The project site is located within a Specific Plan/Precise Plan zoning district (Northwest Open Space [NWOS] Specific Plan) and is designated as Community Park in the City's General Plan. According to the City's General Plan, the Community Park designation provides for major active recreation sites which serve a larger population and geographic area.[1] The development standards and permitted uses for the NWOS Specific Plan are contained in the NWOS Specific Plan No. 2020-01,[2] which was adopted by the City in October 2020. Permitted uses within the NWOS Specific Plan Area include farming, orchards, dog parks, picnic areas, multi-use trails, restroom facilities, equestrian facilities, maintenance facilities, habitat conservation areas, the Putuidem Village and related events, and Williams/Swanner House event facilities. In addition, wineries, wedding venues (except for at the

1 City of San Juan Capistrano. 2002. *San Juan Capistrano General Plan, Land Use Element.* May 7.

2 City of San Juan Capistrano. 2020. *The Northwest Open Space, San Juan Capistrano Specific Plan No. 2020-01, Ordinance No. 1080*. October.

Swanner House), and the sale and service of alcohol (except for at the Swanner House) are permitted with a conditional use permit. Implementation of the proposed project would develop the project site consistent with the intent of the NWOS Specific Plan and the General Plan's Community Park land use designation by providing for passive and active recreation and open space uses and event space. As a result, no changes in existing regulations pertaining to land development with the potential to induce population growth would be required.

Construction of the proposed project is not expected to induce substantial population growth as construction workers are anticipated to come from the City or surrounding communities. Proposed project operations would likely induce a slight, temporary increase in population as visitors avail themselves of the Legacy Ranch facilities, such as the event spaces. This temporary increase in the number of visitors to the City is not anticipated to impact the City's population. Operation of the proposed project would create up to 60 full-time jobs, with additional part-time employment opportunities associated with future events at the project site. However, it is unlikely that these jobs would incite substantial population growth as these new jobs are anticipated to be filled by local residents or residents in the surrounding communities. In addition, the proposed project would include three permanent equestrian caretaker residences. The three equestrian caretakers in residence would be anticipated to come from the surrounding area, and would not result in a significant increase in population within the City or the region. Therefore, the proposed project would not induce substantial population growth in the vicinity of the project site or within the city. Further, any increase in population at the project site would be minimal and consistent with planned population growth for the City, as anticipated by the General Plan and regional planning documents. Therefore, the proposed project would not result in significant economic growth which could in turn increase the demand for housing.

6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

As required by *State CEQA Guidelines* Section 15126.2(d), an Environmental Impact Report (EIR) must identify any significant irreversible environmental changes that could result from implementation of a proposed project. These may include current or future uses of non-renewable resources, and secondary growth-inducing impacts that commit future generations to similar uses. CEQA suggests that irreversible commitments of resources should be evaluated to assure that such current consumption is justified. Each of these three categories is further detailed below.

6.2.1 Changes in Land Use Which Commit Future Generations

The project site currently consists of an open space area, portions of which are developed with the historic Swanner House, the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village. In addition, a barn and associated storage containers are located on the eastern portion of the project site. Trabuco Creek and the Trabuco Creek Trail traverse the project site, parallel to Camino Capistrano with Oso Creek located to the west. Approximately 14 acres of the project site, encompassing Trabuco Creek and its banks, are covenanted with conservation easements. The proposed project would develop the project site with the Legacy Ranch, which would consist of seven cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails/Natural Core. Because the proposed project would occur on land that is designated for park and recreational uses, it would

be consistent with the planned land use for the project site as detailed in the NWOS Specific Plan and would not commit future generations to a significant unplanned change in land use. In addition, the proposed amendments to the Specific Plan under the proposed project would be consistent with the overall intent of the Specific Plan.

6.2.2 Irreversible Damage from Environmental Accidents

No significant environmental damage (e.g., accidental spills or explosion of hazardous material) is anticipated with implementation of the proposed project. Compliance with federal, State, and local regulations, and implementation of **Mitigation Measures HAZ-1**, as discussed in Section 4.8, Hazards and Hazardous Materials of this Draft EIR, would ensure that this potential impact would be reduced to a less than significant level. Accordingly, no irreversible changes (e.g., those that might result from construction of a large-scale mining project, a hydroelectric dam project, or other industrial project) would result from development of the proposed project.

6.2.3 Consumption of Non-Renewable Resources

Consumption of non-renewable resources includes increased energy consumption, conversion of agricultural lands, and lost access to mining reserves. As discussed in Section 6.3.2 below, the California Department of Conservation (DOC) designates the site as “Grazing Land” and “Other Land.” Therefore, no existing agricultural lands would be converted to non-agricultural uses. In addition, the project site does not contain known mineral resources and does not serve as a mining reserve; thus, development of the proposed project would not result in the loss of access to mining reserves. Please refer to Sections 6.3.2 and 6.3.9 below for a discussion of impacts related to agricultural and mining resources, respectively.

As discussed in Section 4.5, Energy, the proposed project would consume energy through fuel usage associated with project construction and day-to-day operations. Project construction activities would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. The construction-related equipment would be fueled by diesel fuel and gasoline. No natural gas demand is anticipated during construction. While some electricity may be required during construction activities, associated with generators and lighting, this analysis assumes that most energy required during project construction would be associated with fuel consumption. As shown in **Table 4.5.A: Energy Consumption Estimates During Construction**, in Section 4.5, construction associated with the proposed project would consume approximately 11,659.3 gallons of gasoline per year and 48,214.3 gallons of diesel fuel per year during construction. Based on fuel consumption obtained from EMFAC2021, approximately 1.1 billion gallons of gasoline and approximately 155.2 million gallons of diesel will be consumed from vehicle trips in Orange County in 2029. Construction associated with the proposed project would increase the annual fuel consumption from vehicle trips in Orange County by approximately less than 0.01 percent for gasoline fuel usage and approximately 0.03 percent for diesel fuel usage. Due to the minimal increase in annual fuel consumption in Orange County, project construction activities would have a negligible effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Orange County’s overall use of the State’s available energy resources.

Energy use associated with operation of the proposed project would consist of natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. Energy consumption was estimated for the proposed project using default energy intensities by land use type in CalEEMod. As shown in **Table 4.5.B: Energy Consumption Estimates**, in Section 4.5, the estimated potential increase in operational electricity demand associated with the proposed project is 1,618,159 kWh per year. Total electricity demand in Orange County in 2024 was 19,225 GWh (19,225,000,000 kWh). Operational activities associated with the proposed project would increase the annual electricity consumption in Orange County by approximately 0.01 percent. In addition, the estimated potential increase in operational natural gas demand associated with the proposed project is 13,680 therms per year. Total natural gas consumption in Orange County in 2024 was 561.7 million therms. Therefore, operational activities associated with the proposed project would negligibly increase the annual natural gas consumption in Orange County by approximately 0.01 percent. The proposed project's electrical and natural gas demand would be relatively small in comparison to Orange County's overall use of the State's available electricity resources. Accordingly, the proposed project's electrical demand would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Furthermore, fuel use associated with the vehicle trips generated by proposed project is estimated at approximately 110,565.4 gallons of gasoline and 16,831.9 gallons of diesel fuel per year. Based on fuel consumption obtained from EMFAC2021, approximately 1.1 billion gallons of gasoline and approximately 155.2 million gallons of diesel will be consumed from vehicle trips in Orange County in 2029. Therefore, vehicle trips associated with the proposed project would increase the annual fuel consumption in Orange County by approximately 0.02 percent for gasoline fuel usage and approximately 0.01 percent for diesel fuel usage. Gasoline and diesel fuel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in Orange County. Accordingly, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

6.3 EFFECTS FOUND NOT TO BE SIGNIFICANT

The environmental topics analyzed in Chapter 4.0, Setting, Impacts, and Mitigation Measures, represent those topics that generated the greatest potential controversy and expectation of adverse impacts associated with development of the proposed project. The following topics are not addressed in this Draft EIR because impacts related to these topics either would not occur or would be less than significant with implementation of applicable mitigation measures. A summary of the conclusions provided in the Initial Study analysis for each of the topics scoped out of this Draft EIR is provided below.

As discussed in Chapter 2.0, Introduction, after the NOP and Initial Study were circulated for public and agency review and based on comments received from the public, the project Applicant revised the proposed project to remove the Farm Stay Core and associated improvements, including the 70 "farm stay" units, farm stay center and amenities building, swimming pool, amphitheater stage, and other community building uses/spaces, and expanded the Equestrian and Natural Cores. In addition, minor modifications to the approximate square footage of proposed improvements in the other proposed cores were made. The revisions to the proposed project would not change the conclusions

of the Initial Study as the removal of the Farm Stay Core represents an overall reduction in development and the overall intensity of proposed uses at the project site.

6.3.1 Aesthetics

As discussed in Section 3.1 of the Initial Study, the proposed project would result in less than significant impacts relating to scenic resources within a State Scenic Highway (Threshold 3.1.b), conflict with applicable zoning and other regulations governing scenic quality or substantially degrading the existing visual character of the site and surrounding area (Threshold 3.1.c) and creation of a new source of substantial light or glare (Threshold 3.1.d). Therefore, project-related impacts with respect to Thresholds 3.1.b through 3.1.d would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.2 Agriculture and Forestry Resources

As discussed in Section 3.2 of the Initial Study, the project site is designated "Grazing Land" and "Other Land" by the California DOC and would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to another use (Threshold 3.2.a). In addition, the proposed project would not conflict with zoning designations for agricultural use and is not currently under a Williamson Act contract (Threshold 3.2.b). Additionally, the project site does not contain any forestland or timberland resources (Threshold 3.2.c). Lastly, the proposed project would not result in environmental changes that could result in the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use (Thresholds 3.2.d and 3.2.e). Therefore, project-related impacts with respect to agriculture and forestry resources would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.3 Air Quality

As discussed in Section 3.3 of the Initial Study, the proposed project would include some uses that may be associated with odor complaints. The proposed project would properly manage and store the small amounts of manure and fertilizer associated with the proposed uses such that operation of the proposed project would not result in odors that would adversely affect a substantial number of people. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (Threshold 3.3.d). Therefore, this impact would be **less than significant** and is not evaluated further in this Draft EIR.

6.3.4 Energy

As discussed in Section 3.6 of the Initial Study, the proposed project would not conflict with the California Energy Commission's Integrated Energy Policy Report (IEPR) and the California Public Utilities Commission's (CPUC) Energy Efficiency Strategic Plan (CPUC Strategic Plan). Some of the proposed buildings would be required to comply with Title 24 and California Green Building Standards Code standards that would also be consistent with the CPUC Strategic Plan strategies and the IEPR building energy efficiency recommendations. This would ensure the proposed project's conformance with the State's energy reduction goals. The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency (Threshold 3.6.b). Therefore, this impact would be **less than significant** and is not evaluated further in this Draft EIR.

6.3.5 Geology and Soils

As discussed in Section 3.7 of the Initial Study, rupture of the San Joaquin Hills blind thrust fault, the nearest Alquist-Priolo Fault Zone located approximately 5 miles from the project site, is not anticipated, and the proposed project would not directly or indirectly cause substantial adverse effects related to fault rupture (Threshold 3.7.a.i). In addition, according to the California DOC, the project site is not within an area identified as having potential for landslides (Threshold 3.7.a.iv). The proposed project would not result in impacts related to soil capability to support the use of septic tanks (Threshold 3.7.e), as the use of septic tanks is not proposed at the project site. Therefore, no impact with respect to geology and soils occur and these impacts are not evaluated further in this Draft EIR.

6.3.6 Hazards and Hazardous Materials

As discussed in Section 3.9 of the Initial Study, the proposed project would result in less than significant impacts related to hazards associated with the routine transport, use, or disposal of hazardous materials (Threshold 3.9.a). Additionally, the proposed project would not result in impacts related to emitting hazardous emissions or hazardous material within 0.25 mile of an existing or proposed school (Threshold 3.9.c), is not located within an airport land use plan or within 2 miles of a public or private airport (Threshold 3.9.e), and would not expose people or structures to significant risk involving wildfires (Threshold 3.9.g). No impacts regarding hazards associated with being located on a hazardous materials site compiled pursuant to Government Code Section 65962.5 (Threshold 3.9.d) would occur as the project site is not included on any list compiled pursuant to Government Code Section 65962.5. The proposed project would also result in less than significant impacts associated with the impairment of implementation of or physical interference with an adopted emergency response or evacuation plan (Threshold 3.9.f). Therefore, these impacts would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.7 Hydrology and Water Quality

As discussed in Section 3.10 of the Initial Study, the majority of the project site is mapped as within Zone X, Area of Minimal Flood Hazard, and is not within a 100-year flood zone. A portion of the project site containing Trabuco Creek is mapped within a Regulatory Floodway; however, no development is proposed in this area. The approximately 14-acre existing conservation covenant encompassing Trabuco Creek and both its banks would be maintained and development of proposed structures would be set back from the covenant boundary by an approximately 100-foot buffer. Therefore, impacts related to impeding or redirecting flood flows would be less than significant (Threshold 3.10.c.iv). In addition, the project site is not located in an area mapped by the California DOC as being potentially inundated by a tsunami and the project site would not be inundated in the event of a seiche. Accordingly, the proposed project would not risk release of pollutants in the event of inundation due to flood hazard, tsunamis, or seiches (Threshold 3.10.d). Therefore, these impacts with respect to hydrology and water quality would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.8 Land Use and Planning

As discussed in Section 3.11 of the Initial Study, construction and implementation of the proposed project would not separate the existing neighborhoods to the north and south as no access to these areas exists or is planned (Threshold 3.11.a) or cause a significant environmental impact due to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project (including, but not limited to the General Plan, NWOS Specific Plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect (Threshold 3.11.b). Therefore, project-related impacts with respect to land use and planning would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.9 Mineral Resources

As discussed in Section 3.12 of the Initial Study, the project site is not located within a mineral resource area designated by the County. Therefore, the proposed project is not anticipated to result in impacts related to the loss of availability of a known mineral resource that would be of value to the region and residents of the State (Thresholds 3.12.a and 3.12.b). No impacts with respect to mineral resources would occur and are not evaluated further in this Draft EIR.

6.3.10 Noise

As discussed in Section 3.13 of the Initial Study, the project site is located approximately 15 miles southeast of John Wayne Airport. There are no private airstrips located within the vicinity of the project site. Therefore, the proposed project would not expose people residing or working in the project site and surrounding area to excessive noise levels generated from nearby airport operations (Threshold 3.13.d). **No impact** would occur, and noise generated by airports is not evaluated further in this Draft EIR.

6.3.11 Population and Housing

As discussed in Section 3.14 of the Initial Study, population generated by the proposed project would not exceed local and regional population growth projections and any population growth generated by the proposed project would not be substantial (Threshold 3.14.a). In addition, the proposed project would not displace any existing housing and construction of replacement housing would not be necessary. The proposed project would not involve the displacement of substantial numbers of existing housing or people and would not require the construction of replacement housing elsewhere (Threshold 3.14.b). Therefore, project-related impacts with respect to population and housing would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.12 Public Services

As discussed in Section 3.15 of the Initial Study, the Orange County Fire Authority (OCFA) and Orange County Sheriff's Department would continue providing services to the project site, would not likely require additional firefighters or law enforcement officers to serve the proposed project, and the construction of a new or expanded fire or police stations would not be required (Thresholds 3.15.a.i and 3.15.a.ii). In addition, the proposed project is unlikely to produce any additional students to Capistrano Unified School District (CUSD) schools (Threshold 3.15.a.iii). The proposed project would develop the project site with more intensive recreational uses, and it is anticipated that impacts to

surrounding parks and recreational facilities would not be substantial as any temporary visitors staying at the project site are expected to use on-site recreational facilities (Threshold 3.15.a.iv). The proposed project would also result in less than significant impacts on other public facilities (Threshold 3.15.a.v). Therefore, project-related impacts with respect to public services would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.13 Recreation

As discussed in Section 3.16 of the Initial Study, the proposed project would develop the project site with more intensive recreational uses and is not expected to contribute to population growth directly or indirectly. Therefore, impacts to surrounding parks and recreational facilities are anticipated to be minimal (Threshold 3.16.a). Additionally, the proposed project would not cause or accelerate the substantial physical deterioration of existing recreational facilities, so it would not require the construction or expansion of off-site recreational facilities (Threshold 3.16.b). Therefore, project-related impacts with respect to recreation would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.14 Transportation

As discussed in Section 3.17 of this Initial Study, the proposed development would not include any sharp curves, dangerous driveway intersections, or visual obstructions for drivers. Therefore, impacts related to a substantial increase in hazards due to a design feature or incompatible use would be less than significant (Threshold 3.17.c). Additionally, final site plans would be subject to review and approval by OCFA and the Orange County Sheriff's Department to ensure adequate emergency vehicle access to and within the project site prior the issuance of building permits. Adherence to the emergency access measures required by the City would ensure impacts related to inadequate emergency access would be less than significant (Threshold 3.17.d). Therefore, these impacts with respect to transportation would be **less than significant** and are not evaluated further in this Draft EIR.

6.3.15 Utilities and Service Systems

As discussed in Section 3.19 of the Initial Study, all development within the City, including the proposed project, is required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991), AB 939 (California Department of Resources Recycling and Recovery [CalRecycle]), AB 341, and other local, State, and federal solid waste disposal standards. Through compliance with AB 1327, AB 939, AB 341, and all other applicable local, State, and federal solid waste disposal standards, implementation of the proposed project would not otherwise impair the attainment of California solid waste reduction goals. In addition, as noted above, the Prima Deshecha Landfill has adequate capacity to serve the proposed project (Threshold 3.19.e). Therefore, these impacts with respect to utilities and service systems would be **less than significant** and are not evaluated further in this Draft EIR.

6.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Even with implementation of the mitigation measures recommended in this Draft EIR, the proposed project would result in the following significant unavoidable impact:

- **Conflict with *State CEQA Guidelines* Section 15064.3(b).** As discussed in Section 4.17, Transportation, of this Draft EIR, in the project base year (2025), the proposed project's total City vehicle miles traveled (VMT) of 1,601,189.10 would be higher than the City's VMT threshold of 1,600,753.66 and would result in a net increase in VMT of 435.44 (0.03 percent). The proposed project would implement specific design features and include several VMT reduction measures from the California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA Handbook), which could reduce the proposed project's operational VMT to below the City's threshold, including the provision of end-of-trip bicycle facilities and pedestrian network improvements as detailed in **Mitigation Measure TRA-1**. However, it cannot be guaranteed that employees and visitors to the project site would use these provided facilities, and the use of these provided facilities cannot be enforced. Therefore, the VMT reduction provided by these measures may not be achieved and the proposed project would therefore result in a **significant and unavoidable** transportation impact related to VMT. As there are no additional feasible or enforceable mitigation measures that would reduce project VMT, operation of the proposed project would result in a result in a **significant and unavoidable** transportation impact related to VMT.

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