Norco Valley Square Project

Draft Environmental Impact Report
State Clearinghouse No. 2020039023

prepared by

City of Norco
Planning Department
2870 Clark Avenue
Norco, California 92860
Contact: Steve King, Planning Director

prepared with the assistance of

Rincon Consultants, Inc.
1980 Orange Tree Lane, Suite 105
Redlands, California 92374

September 2020

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Environmental Scientists | Planners | Engineers
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Table of Contents

Tables

Figures

Appendices

Acronyms and Abbreviations

°C	Degrees Celsius
µg/m_3	Micrograms per cubic meter
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	Average daily trips
AEP	Association of Environmental Professionals
AF	Acre-feet
AFY	Acre-feet per year
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
amsl	Above mean sea level
AQMP	Air Quality Management Plan
APN	Assessor's Parcel Number
Basin	South Coast Air Quality Basin
bgs	Below ground surface
BMPs	Best Management Practices
C-G	Commercial General
CAA	Clean Air Act of 1970
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CA MUTCD	Caltrans *California Manual on Uniform Traffic Control Devices*
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code

CCA	Community Choise Aggregation
CCAR	California Climate Action Registry
CDA	Chino Desalter Authority
CDFW	California Department of Fish and Wildlife
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act
cf	Cubic feet
CFGC	California Fish and Game Code
CFR	Federal Code of Regulations
CGS	California Geological Survey
CH_4	Methane
CHRIS	California Historical Resources Inventory System
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community noise equivalent level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CNUSD	Corona Norco Unified School District
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
COVID-19	Coronavirus Disease 2019
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CUP	Conditional Use Permit
CWA	Clean Water Act
cy	Cubic yard
DAMP	Drainage Area Management Plan
dB	Decibel
dBA	A-weighted decibels

DIF	Development impact fee
DPM	Diesel particulate matter
DTSC	Department of Toxic Substances Control
du	Dwelling unit
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EO	Executive Order
EOP	Emergency Operations Plan
ESA	Environmental Site Assessment
EV	Electric Vehicle
°F	Degrees Fahrenheit
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act of 1973
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
gpd	Gallons per day
GHG	Greenhouse gas
GIS	Geographic information systems
GMST	Global mean surface temperature
GPS	Global positioning system
GSA	Groundwater Sustainability Agency
GSP	Groundwater sustainability plan
GWh	Gigawatt hours
GWP	Global warming potential
HCM	Highway Capacity Manual
HC	Hydrocarbons
HCOC	Hydrologic Condition of Concern
HCP	Habitat Conservation Plan
HDO	Housing Development Overlay
HFCs	Hydroflourocarbons
HVAC	Heating, ventilating, and air conditioning
Hz	Hertz

I	Interstate
IBC	International Building Code
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan Report
ITE	Institute of Transportation Engineers
JCSD	Jurupa Community Services District
kW	Kilowatt
kWh	Kilowatt hour
LACM	Natural History Museum of Los Angeles County
L_{dn}	Day-night average level
L_{eq}	Equivalent noise level
LEV	Low Emission Vehicle
LHMP	Local Hazard Mitigation Plan
LID	Low impact development
LOS	Level of service
LSAT	Land-Surface Air Temperature
LSTs	Localized significance thresholds
MBTA	Migratory Bird Treaty Act of 1918
MCL	Maximum contaminant level
MGD	Million gallons per day
MLD	Most Likely Descendant
mm	Millimeters
MMRP	Mitigation Monitoring and Reporting Program
MMT	Million metric tons
MMthm	Million U.S. therms
MOU	Memorandum of Understanding
MPO	Metropolitan planning organization
MS4	Municipal separate storm sewer system
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MT	Metric tons
MT CO_2e	Metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
N_2O	Nitrous oxide

NAHC	Native American Heritage Commission
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NOC	Notice of Completion
NOD	Notice of Determination
NOP	Notice of Preparation
NO_2/NO_x	nitrogen oxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
O_3	Ozone
OC	Organic compounds
OEHHA	Office of Environmental Health Hazard Assessment
OG	Organic gases
OSHA	Occupational Health and Safety Administration
Pb	Lead
PFAS	Per- and polyfluoroalkyl Substances
PFCs	Perflourocarbons
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonate
$PM_{2.5}$	Particulate matter less than 2.5 micrometers in aerodynamic diameter
PM_{10}	Particulate matter less than 10 micrometers in aerodynamic diameter
ppm	Parts per million
PPV	Peak particle velocity
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Plan
PV	Photovoltaic
RCA	Regional Conservation Authority
RCFCD	Riverside County Flood Control District
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCNM	FHWA Roadway Construction Noise Model

RCSD	Riverside County Sheriff's Department
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Needs Allocation
RIVTAM	Riverside Transportation Analysis Model
RLAFC	Riverside Local Agency Formation Commission
RMS	Root mean squared
ROC	Reactive organic compounds
ROG	Reactive organic gas
RPS	Renewable Portfolio Standard
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
RV	Recreational vehicle
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison Company
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
sf	Square feet
SF_6	Sulfur hexaflouride
SGMA	Sustainable Groundwater Management Act
SLF	Scared Lands File
SO_2	Sulfur dioxide
SoCalGas	Southern California Gas Company
SO_x	sulfur oxides
SP	Specific Plan
SPL	Sound power level
SR	State Route
SRA	Source Receptor Area
SSC	Species of Special Concern
STC	Sound transmission class

STEM	Science, Technology, Engineering, and Math
SVP	Society for Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	Storm Water Resources Control Board
TACs	Toxic air contaminants
TAZ	Traffic analysis zone
TCR	Tribal Cultural Resources
TIA	Traffic Impact Analysis
TMDL	Total maximum daily load
TNM	FHWA's Traffic Noise Model
TUMF	Transportation Uniform Mitigation Fee
UCMP	University of California Museum of Paleontology
UFC	Uniform Building Code
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service UTRs utility tractors
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle miles traveled
VOC	Volatile organic compounds
WCE	Western Community Energy
WEAP	Worker Environmental Awareness Program
WMO	World Meteorological Organization
WMWD	Western Municipal Water District
WoS	Water of the State
WRCOG	Western Riverside Council of Governments
WRCRWA	Western Riverside County Regional Wastewater Authority
WSA	Water Supply Assessment
WQMP	Water Quality Management Plan
ZEV	Zero Emissions Vehicle

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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed Norco Valley Square Project (project). This section summarizes the characteristics of the project, alternatives to the project, and the environmental impacts and mitigation measures associated with the project.

Project Synopsis

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Project Description

This EIR has been prepared to examine the potential environmental effects of the Norco Valley Square Project. The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

The project site is located in the southwest corner of Third Street and Hamner Avenue in central Norco and consists of three parcels totaling approximately 19.1 acres. The project site is relatively flat except for a small hill in the center of the site. The Assessor Parcel Numbers are 126-050-002, 126-050-004, and 129-380-010. The project site is located in the Norco Auto Mall Specific Plan Area and is located in Area A, which has an underlying zoning designation of Commercial-General (C-G). The C-G zone, as outlined in City of Norco Municipal Code Chapter 18.29, permits retail, eating and drinking establishments, and entertainment to serve the needs of the community. The project site is also within the Housing Development Overlay (HDO) zone which allows residential development. The project would not require amendments to the City's General Plan or the Norco Municipal Code.

The project site is currently undeveloped with exception to the existing RV sales lot (Norco RV Center, located at 2350 Hamner Avenue) located at the southwest corner of the Third Street and Hamner Avenue intersection. The remainder of the project site contains remnants of former building foundations with evidence of previous grading and development. The project site currently contains a few scattered trees and does not contain any permanent structures.

Project Characteristics

The proposed mixed-use project would consist of multi-family residential dwelling units, a hotel development, a food garden, and intermittent outdoor entertainment and recreation amenities. The residential portion of the project (320 market-rate multi-family residential units) would be constructed on approximately 11.3 acres on the western half of the project site, comprised of one-, two-, and three-bedroom multi-family residential units in 19 three-story buildings. The residential area would also include one clubhouse, fitness center, leasing office, outdoor pool and spa, and lounge area.

The 120-room hotel development, a food garden (approximately 8,700 sf), and outdoor entertainment and recreation space would be constructed on approximately 7.6 acres on the eastern half of the project site.

The food garden would have a western town theme and aesthetic, comprised of eight buildings with outdoor dining and landscaped soft-seating (lawn seating) areas. The food garden would generally operate from 7:00 a.m. to 11:00 p.m. The project would include an outdoor entertainment and recreation area in the northeastern portion of the project site to serve as community gathering space for events such as farmers markets, food trucks, and artist exhibits. The project would also include an equestrian trail along the frontage of Third Street, which would connect to an existing trail that runs east-west along Third Street; along most of the frontage of Hamner Avenue, wrapping around the proposed park space and water tower by the proposed Hamner Avenue driveway entrance; and wrap around the west boundary of the proposed food garden area with access to the proposed horse paddock.

Plans for the project are included in Appendix B of this EIR. Table ES-1 summarizes the project characteristics.

Table ES-1 Project Characteristics

APN	126-050-002, 126-050-004, and 129-380-010
Lot Area	19.1 acres, or 832,432 square feet (sf)
Height/Stories	19 three-story residential buildings and one two-story leasing office/fitness center building, maximum height of 45 feet Eight one- story food garden buildings plus one storage kiosk, maximum height of 35 feet One four-story hotel, maximum height of 60 feet
Residential (320 units)	398,042 gross sf, 292,178 net rentable sf
Food Garden	8,700 sf
Food Garden Outdoor Space	118,800 sf[2]
Hotel (120 rooms)	70,000 sf

[1] Residential area includes residences, one clubhouse, fitness center, leasing office, outdoor pool and spa, and lounge area totaling up to 13,407 sf.

[2] Food Garden Outdoor Space includes a restroom and storage kiosk (800 sf) for customers and site maintenance crew, respectively, and recreational components including a bocce court and lawn games, a stage for live performances, an open space park, horse paddock, and an equestrian trail.

The proposed residential dwelling units include 54 to 110 sf of private outdoor space for each unit (averaging 75 sf) in the form of patios or balconies. Private outdoor patio and balcony space would total 24,129 sf across the 320 proposed residential units. The residential component would also include approximately 166,000 sf of common outdoor space, equaling approximately 519 sf per

dwelling unit. The common open space areas would include low-water landscaping and lawn/turf areas for outdoor activities, exclusively for use by project residents. Additional shared residential amenities would include the clubhouse, fitness center, and outdoor pool and spa with lounge seats.

Common space throughout the commercial components would include landscaped areas by the outdoor entertainment and recreation area in the northeast portion of the site by the proposed food garden. The outdoor entertainment and recreation area would include bocce court and lawn games, a stage for live performances, an open space park, horse paddock, and an equestrian trail. Landscaping throughout the project site would consist of a variety of California native and non-native plants, and low water use trees, shrubs, and ground cover. The project proposes wood fencing along Hamner Avenue and Third Street, consistent with City roadway and trail design standards. The wood fencing would provide a physical demarcation of the proposed equestrian trails fronting Hamner Avenue and Third Street and serve as a visual cue for roadway traffic of the potential presence of horses, riders, and pedestrians.

Parking and Site Access

The project would provide a total of 581 parking spaces for residential uses, 91 parking spaces for food garden uses, 120 parking spaces for hotel uses, and 76 parking spaces to be shared for all proposed uses. No underground parking is proposed. A total of 27 parking spaces would be ADA-compliant (10 spaces for residential use and 17 spaces for food garden and hotel use) and 15 anchored bicycle racks would be installed for bicycle parking (9 racks for food garden use and 6 racks for hotel use). Of the 76 shared parking spaces, 17 spaces would be reserved for electric vehicle (EV) charging (10 EV spaces for food garden use and 7 EV for hotel use), and 27 spaces would be reserved for fuel efficient vehicles and/or vanpools (16 efficiency/vanpool spaces for food garden use and 11 efficiency/vanpool spaces for hotel use).

The main driveway for the project site would be located on Hamner Avenue, and the secondary access point would be located on Third Street. The main circulation flow would be via the main driveway on Hamner Avenue, which would provide access for all proposed uses. Secondary access would be from the Third Street driveway, which would primarily provide access to the proposed residential development and food garden. Hamner Avenue and Third Street have existing curb cuts where proposed driveways would be placed. Pedestrian access points would be located along Third Street just west of the food garden, and on both sides of the main driveway located on Hamner Avenue.

Utilities

The City of Norco Public Works Department provides the following utility services: solid waste, water, wastewater, and stormwater. Southern California Edison supplies electricity and the Southern California Gas Company provides natural gas to the City of Norco.

Construction and Grading

Construction of the project is expected to occur over approximately 42 months. Construction activities would be separated into three phases. The first phase would include initial site preparation and grading for the entire project site, as well as installation of wet and dry utilities and asphalt paving for apartments and food garden; the second phase would include building construction and architectural coating for apartment and food garden parcels of the project site; and the third phase would include building construction, architectural coating, installation of wet and dry utilities, and asphalt paving for hotel parcel of project site. During the grading phase, the maximum depth of

excavation would be approximately 30 feet, and the total amount of excavated soil would be approximately 60,000 cubic yards. No soil would be exported from the project site since it would be used as fill and balanced on site. Construction equipment for the project would include earthwork equipment such as graders, rollers, and cranes, as well as small hand and power tools.

Green Building Features

The project would implement green building and sustainable design features for construction materials, interior finish products, heating and air conditioning, lighting, and water use systems with the intent of reducing project energy needs and greenhouse gas emissions. These features would be incorporated into all project buildings and would comply with the California Green Building Standards Code ([CALGreen]; California Code of Regulations, Title 24, Part 11) as implemented by the City of Norco. Project operations would include a recycling program in order to meet a 50 percent minimum waste diversion goal, consistent with statewide and citywide waste reduction goals.

Project Objectives

The project intends to achieve the following objectives:

1. To be consistent with the City's Housing Development Overlay, General Plan, zoning code, Norco Auto Mall Specific Plan, and the City's Strategic Plan.
2. To create a mixed-use, small-town village experience by combining residential, dining, hospitality, and gathering spaces that complement the City's equestrian lifestyle.
3. To promote the use of alternative modes of transportation such as horseback riding, biking, and walking between the project site and existing adjacent uses.
4. To use existing land resources more efficiently by providing a well-planned, infill project next to an established corridor on an underutilized, vacant site.
5. To diversify the City's economy with a project that:
    a. Provides new housing options for Norco residents, and attracts and maintains working professionals, families, Veterans, and retirees to achieve the goals of the City's General Plan Housing Element and towards meeting the City's Regional Housing Needs Allocation.
    b. Enhances public services and allows the City to be more fiscally sound by capturing additional transit occupancy tax revenues by leveraging the project site's prime location near I-15, job centers, and SilverLakes Park.
    c. Provides more amenities for local residents, workers, and visitors in the form of a food garden with outdoor entertainment, recreational amenities such as equestrian and pedestrian trails, play areas, and a public gathering space available for all Norco residents.

Alternatives

Section 15126.6 of the California Environmental Quality Act (CEQA) states that all EIRs include a comparative evaluation of the proposed plan with alternatives to the plan that can attain most of the plan's basic objectives but would avoid or substantially lessen any of the significant effects of the plan. CEQA requires an evaluation of a "range of reasonable" alternatives, including the "no project" alternative. The following is a brief description of the alternatives evaluated in this EIR.

- **Alternative 1 (No Project Alternative)** assumes that the proposed residential, food garden, and hotel uses would not be developed on the project site. The majority of the project site would remain vacant and the RV sales lot would remain in operation.
- **Alternative 2 (Reduced Residential Density Alternative)** would entail an approximately 30 percent reduction in the number of residential units provided (from 320 proposed residential units to 226) to meet the minimum development potential of 20 dwelling units per acre identified for the project site in the General Plan 2014-2021 Housing Element. Proposed food garden and outdoor recreational amenities, and hotel uses would remain the same as proposed for the project.
- **Alternative 3 (Reduced Food Garden Alternative)** would entail an approximately 30 percent reduction in the square footage for food garden use (from 8,700 square feet to 6,090 square feet). Proposed residential and hotel uses would remain the same as proposed of the project, and outdoor recreational amenities associated with the food garden use would increase.

Based on the analysis discussed in Section 7, *Alternatives,* Alternative 1 (No Project Alternative) is considered the environmentally superior alternative since it would result in the fewest potential environmental impacts, though traffic impacts would be greater than the project due to unmitigated existing conditions. As required by the CEQA Guidelines Section 15126.6(e)(2), another environmentally superior alternative must be identified among the other alternatives considered because the environmentally superior alternative was identified as the No Project Alternative.

Both the Alternative 2 (Reduced Residential Density Alternative) and Alternative 3 (Reduced Food Garden Alternative) would reduce overall air quality and GHG emissions, energy use, and noise impacts due to reduced residents and food garden patrons, respectively. However, the Alternative 2 would be environmentally superior due to the overall reduction in impacts to public services and utilities and service systems resulting from fewer residents than compared to the project and the other alternatives. Please refer to Section 7, *Alternatives*, for a complete discussion of project alternatives.

Areas of Known Controversy

The City of Norco, as lead agency, circulated a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period, which started on March 9, 2020 and ended on April 7, 2020. The City distributed the NOP to the State Clearinghouse, responsible agencies, and other interested parties. An EIR Public Scoping Meeting was scheduled for March 26, 2020, which intended on providing information about the project to members of public agencies, interested stakeholders, and residents/community members. However, the Public Scoping Meeting was determined to be non-essential due to the statewide issuance of Executive Order N-33-20 by California Governor Gavin Newsom in response to the global pandemic and public health concerns caused by the coronavirus.

The City received comments during the NOP public review and comment period, via mail and email, and letters from six public agencies. Appendix A contains the NOP and all comments received during the 30-day review period. Information on how each comment is addressed in the EIR is summarized in Section 1, *Introduction*.

Public Scoping comments highlighted the following areas of concern:

- Preservation of Norco's rural and equestrian lifestyle as "Horsetown USA"
- Air quality, noise, and traffic impacts to neighboring schools (such as Norco College; Norco College Science, Technology, Engineering, and Math Center; John F. Kennedy Middle College High School)
- Demand for police and fire protection services
- Capacity of K-12 public schools
- Water demand due to recent drought years

Scope and Content of the EIR

The following issues were found to include potentially significant impacts and have been studied in detail in the EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

Issues not studied in detail are evaluated in Section 5, *Effects Found Not to be Significant*, and summarized in Table 1-2, in Section 1, *Introduction*. As indicated in Section 5, *Effects Found Not to be Significant*, there is no substantial evidence that significant impacts would occur to the following issue areas: Agricultural and Forest Resources, Mineral Resources, Population and Housing, Recreation, and Wildfire.

Summary of Impacts and Mitigation Measures

Table ES-2 summarizes the environmental impacts of the project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved pursuant to CEQA Guidelines Section 15093.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under CEQA Guidelines Section 15091.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-2 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure (s)	Residual Impact
Aesthetics		
Impact AES-1. The project would not substantially degrade the public view of Chino Hills, the San Gabriel Mountains, Beacon Hill, or Norco Bluffs.	None required.	Less than significant.
Impact AES-2. The project would not substantially damage scenic resources within the viewshed of a designated or eligible State scenic highway as defined Caltrans and the California Scenic Highway Program.	None required.	No impact.
Impact AES-3. The project would alter the site from one of an RV sales lot and vacant lot to a multi-family residential complex, food garden, and hotel. However, the project would conform to the City's vision as defined by policies designed to enhance the visual quality of new development. Therefore, the project would not substantially degrade the existing visual character of the site or surrounding area.	None required.	Less than significant.
Impact AES-4. The project would introduce new sources of light and glare to the project site typical of residential, commercial/food establishment, and hotel uses. However, adherence to State and local standards and regulations regarding interior and exterior lighting, site design, and construction permitting would reduce impacts to a less than significant level.	None required.	Less than significant.
Agriculture and Forestry		
Impact AG-1 through AG-5. The project would not convert forest land or Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance, and is not zoned for agricultural or forestry use.	None required.	No impact.
Air Quality		
Impact AQ-1. The project would not generate growth which would exceed the Air Quality Management Plan (AQMP) forecasts and would not result in an increase in air quality violations that conflict with the AQMP.	None required.	Less than significant.
Impact AQ-2. The project would not exceed Southern California Air Quality Management District thresholds for criteria pollutants during construction and operation.	None required.	Less than significant.
Impact AQ-3. The project would release toxic air contaminants during construction and operation. However, emissions would not exceed established thresholds or expose nearby receptors to significant health risks.	None required.	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
Impact AQ-4. The project does not propose land uses that are associated with odor complaints.	None required.	Less than significant.
Biological Resources		
Impact BIO-1. Implementation of the project could result in direct or indirect impacts to burrowing owl and nesting birds and raptors through removal of ground cover and habitat, and from construction during the breeding season.	**BIO-1 Burrowing Owl Preconstruction Survey.** A qualified biologist shall conduct a preconstruction presence/absence survey for burrowing owls within 30 days prior to site disturbance. The survey methodology shall be consistent with the methods outlined in the Burrowing Owl Survey Instructions in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). If burrowing owl are found, the project applicant shall immediately inform the CDFW, USFWS, and RCA, and shall coordinate with these agencies to avoid or passively relocate the burrowing owl in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012). If burrowing owl are not found, no further action shall be needed. The following actions shall be implemented if burrowing owl is found during the pre-construction survey: ▪ If burrowing owl(s) are found, buffers for occupied burrows shall be established at approximately 500 feet during the breeding season (February 1 to August 31) and at approximately 150 feet for the non-breeding season. These buffers may be adjusted in consultation with the RCA and monitored at the discretion of a qualified biologist. The buffer zone shall be clearly marked with flagging and/or construction fencing. ▪ If an occupied burrow cannot be avoided and the burrowing owl(s) must be moved, passive relocation techniques shall be implemented. Passive relocation includes encouraging owls to move from occupied burrows to alternate natural burrows outside of the 500-foot buffer. The MSHCP and CDFW guidance indicate that passive relocation must be conducted between September 1 and February 1 (CDFW 2012). Occupied burrows shall not be disturbed during the breeding season. ▪ If project construction work is delayed (does not occur within 30 days of the initial pre-construction survey) or if project activities are halted for 30 days or more, additional pre-construction burrowing owl surveys may be required as determined by the Lead Agency.	Less than significant with mitigation incorporated.

Impact	Mitigation Measure (s)	Residual Impact
Impact BIO-2. Construction of the project would not impact any wetlands, vernal pools, or fairy shrimp habitat.	None required.	No impact.
Impact BIO-3. No proposed or existing MSHCP core areas, linkages, or habitat blocks are on or near the project site, but construction of the project may impact nesting habitat.	**BIO-2 Nesting Birds.** If project activities must occur during the avian nesting season (February to September), a pre-construction nesting bird survey for active nests must be conducted by a qualified biologist, one to two weeks prior to construction activities. If active nests are identified and present on site, clearing and construction within 50 to 250 feet of the nest, depending on the species involved (50 feet for common urban-adapted native birds and up to 250 feet for raptors), shall be postponed until the nest is vacated and juveniles have fledged, and there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. If construction must occur within this buffer, it shall be conducted at the discretion of a qualified biological monitor to assure that indirect impacts to nesting birds are avoided.	Less than significant with mitigation incorporated.
Impact BIO-4. The project would not result in the removal of any street trees and implementation of the project would comply with applicable local policies and ordinances.	None required.	No impact.
Cultural and Tribal Cultural Resources		
Impact CUL-1. There are no significant historical or cultural resources associated with the project site. However, there is potential for the project to adversely impact previously unidentified cultural resources during construction-related ground-disturbance.	**CUL-1 Unanticipated Discovery of Cultural Resources**. If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historic Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation and archaeological monitoring may be warranted to mitigate any significant impacts/adverse effects.	Less than significant with mitigation.

Impact	Mitigation Measure (s)	Residual Impact
Impact CUL-2. There are no known human remains on the project site. However, there is potential for the project to adversely impact previously unidentified human remains during construction-related ground-disturbance.	**CUL-2 Unanticipated Discovery of Human Remains**. In the event of an unanticipated discovery of human remains, all work on the project site shall be halted pursuant to California Health and Safety Code Section 7050.5 and the Riverside County coroner shall be notified immediately. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, the coroner shall determine and notify as most likely descendant by telephone within 24 hours. The most likely descendant shall complete an inspection of the site and discovered human remains within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Additionally, **Mitigation Measures TCR-1A, TCR-1B,** and **TCR-1C** would apply and further reduce potential impacts by supporting Native American monitoring and providing for the respectful treatment and disposition in the event that tribal cultural are found during ground disturbing activities.	Less than significant with mitigation.
Impact TCR-1. An initial investigation did not identify any potential likelihood for the site to support either archaeological sites or human remains. However, construction of the project would involve ground-disturbing activities such as grading and surface excavation, with the potential to unearth or adversely impact previously unidentified tribal cultural resources.	**TCR-1 Tribal Monitoring.** Prior to the issuance of a grading permit, the project applicant shall contact the consulting tribe(s) with notification of the proposed grading and shall make a good-faith effort, as determined by the City's Development Director, to enter into a Tribal Cultural Resources Treatment and Monitoring Agreement with each Tribe that determines its tribal cultural resources may be present on the site. The agreements shall include, but not be limited to, outlining provisions and requirements for addressing the handling of tribal cultural resources; project grading and development scheduling; terms of compensation for the Tribal monitors; treatment and final disposition of any tribal cultural resources, including but not limited to sacred sites, burial goods and human remains, discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. The terms of the agreements shall not conflict with any of these mitigation measures. A copy of the agreement shall be provided to the City of Norco Planning Department prior to the issuance of a grading permit. **TCR-2 Tribal Cultural Resources – Archaeological Monitoring.** At least 30 days prior to application for a grading permit and before any grading,	Less than significant with mitigation.

Impact	Mitigation Measure (s)	Residual Impact
	excavation and/or ground disturbing activities on the site take place, the project applicant shall retain a Secretary of Interior Standards-qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Ground-disturbing activities may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, weed abatement, boring, grading, excavation, drilling, and trenching. The on-site monitoring would end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. The Project Archaeologist, in consultation with interested Tribes identified in Mitigation Measure TCR-1A, and the project applicant, shall develop an Archaeological Monitoring Plan to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the Plan shall include: 1. Project grading and development scheduling. 2. The development of a rotating or simultaneous schedule in coordination with the project applicant and the Project Archeologist for designated Native American Tribal Monitors from the consulting Tribes during grading, excavation and ground-disturbing activities on the site. 3. The safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all Project Archaeologists. 4. The protocols and stipulations that the project applicant, Tribes and Project Archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. **TCR-3 Treatment and Disposition of Tribal Cultural Resources.** If tribal cultural resources are inadvertently discovered during ground-disturbing actives for this project. The following procedures will be carried out for treatment and disposition of the discoveries: 1. **Temporary Curation and Storage.** During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the Project Archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried by the Project	

Impact	Mitigation Measure (s)	Residual Impact
	Archeologist with tribal monitor oversite of the process. 2. **Treatment and Final Disposition.** The project applicant shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The project applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Eastvale Planning Department with documentation of same: a. **Reburial on-site.** Accommodate the process for on-site reburial of the discovered items with the consulting Tribes. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed. b. **Curation**. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards pursuant to 36 CFR Part 79, and therefore, would be professionally curated and made available to other archaeologists or researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation. c. **Disposition Dispute.** If more than one Tribe is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center. d. **Final Report.** At the completion of grading, excavation and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the Project Archaeologist and Tribal Monitors within 60 days of completion of grading. This report shall: i. Document the impacts to the known resources on the property; ii. Describe how each mitigation measure was fulfilled;	

Impact	Mitigation Measure (s)	Residual Impact
	iii. Document the type of cultural resources recovered and the disposition of such resources; iv. Provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; v. In a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. vi. All reports produced will be submitted to the City, Eastern Information Center and consulting tribes.	
Energy		
Impact E-1. The project would consume electricity, natural gas, and fuel during construction and operation. However, the project would not place significant additional demand on Southern California Edison nor Southern California Gas and would comply with applicable conservation standards. Neither project construction nor operation would result in wasteful, inefficient, or unnecessary consumption of energy.	None required.	Less than significant.
Impact E-2. The project would not conflict with or obstruct State regulations or the Norco General Plan Conservation Element policies aimed at encouraging energy efficiency.	None required.	No impact.
Geology and Soils		
Impact GEO-1. The project site is not located on an active fault nor contains geologic units, soils, or topographic features that would result in seismic-related ground failure, liquefaction, or landslides.	None required.	Less than significant.
Impact GEO-2. Temporary erosion and/or loss of topsoil during project construction would be reduced with implementation of the project Stormwater Pollution Prevention Plan (SWPPP). Project site plans include landscaping and hardscaping, with no loose or exposed topsoil.	None required.	Less than significant.
Impact GEO-3. The project site does not contain unstable or expansive geologic units or soils.	None required.	Less than significant.
Impact GEO-4. The project would not include the installation or use of septic tanks or alternative wastewater disposal systems.	None required.	No impact.
Impact GEO-5. There are no known fossil localities in the project vicinity. However, the project has the potential to adversely impact paleontological resources during project construction.	**GEO-1 Implement Paleontological Resources Mitigation** The following mitigation measures shall only be implemented during ground construction activities (i.e., grading, trenching, foundation work, excavations) where ground disturbance exceeds 10 feet below ground surface within project areas underlain by	Less than significant with mitigation.

Impact	Mitigation Measure (s)	Residual Impact
	Quaternary old sedimentary deposits (i.e., Qof3 and Qvoa). a. **Develop a Paleontological Resources Impact Mitigation Plan.** Prior to the start of construction, a qualified professional paleontologist shall be retained to prepare and implement a Paleontological Resources Impact Mitigation Plan (PRIMP) for the project. A Qualified Paleontologist is an individual who meets the education and professional experience standards as set forth by the SVP (2010), which recommends the paleontologist shall have at least a Master's Degree or equivalent work experience in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques. The PRIMP shall describe mitigation recommendations in detail, including paleontological monitoring procedures; communication protocols to be followed in the event that an unanticipated fossil discovery is made during project development; and preparation, curation, and reporting requirements. b. **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the commencement of ground disturbing activities, the Qualified Paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting. In the event a fossil is discovered by construction personnel anywhere in the project area, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before re-starting work in the area. If it is determined that the fossil(s) is (are) scientifically significant, the qualified paleontologist shall complete the mitigation outlined below to mitigate impacts to significant fossil resources. c. **Paleontological Monitoring.** Initially, full-time monitoring shall be conducted during ground construction activities where ground disturbance exceeds 10 feet below ground surface within deposits of Quaternary old (early Holocene to late Pleistocene) alluvial fan (Qof3) and axial-channel (Qvoa) deposits. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who meets the minimum	

Impact	Mitigation Measure (s)	Residual Impact
	qualifications per standards set forth by the SVP (2010), which includes a B.S. or B.A. degree in geology or paleontology with one year of monitoring experience and knowledge of collection and salvage of paleontological resources. The Qualified Paleontologist shall determine the duration and timing of the monitoring. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. i. **Fossil Discoveries.** In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources. ii. **Salvage of Fossils.** If fossils are discovered, all work in the immediate vicinity should be halted to allow the paleontological monitor, and/or lead paleontologist to evaluate the discovery and determine if the fossil may be considered significant. If the fossils are determined to be potentially significant, the qualified paleontologist (or paleontological monitor) should recover them following standard field procedures for collecting paleontological as outlined in the PRIMP prepared for the project. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist should have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. If fossils are discovered, the Qualified Paleontologist (or Paleontological Monitor) shall recover them as specified in the project's PRIMP. d. **Preparation and Curation of Recovered Fossils.** Once salvaged, significant fossils should be identified to the lowest possible	

Impact	Mitigation Measure (s)	Residual Impact
	taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection (such as the NHMLAC), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Paleontologist. e. **Final Paleontological Mitigation Report.** At the conclusion of laboratory work and museum curation, a final report shall be prepared describing the results of the paleontological mitigation monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The final report shall be submitted to the City of Norco. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.	
Greenhouse Gas Emissions		
Impact GHG-1. The project would generate new greenhouse gas (GHG) emissions from temporary construction activities and long-term proposed uses. However, the per service capita GHG emissions would not exceed the project-specific GHG efficiency threshold.	None required.	Less than significant.
Impact GHG-2. Project emissions would be below the project-specific efficiency threshold, consistent with the statewide 2017 Scoping Plan reduction targets, and the project would be consistent with applicable GHG reduction measures of Southern California Association of Governments 2016 Regional Transportation Plan/ Sustainable Communities Strategy and the Western Region Council of Governments Subregional Climate Action Plan.	None required.	Less than significant.
Hazards and Hazardous Materials		
Impact HAZ-1. The project entails residential and commercial uses that would not routinely transport, use, or dispose of hazardous materials nor result in the accidental release of hazardous materials.	None required.	Less than significant.
Impact HAZ-2. The project site is located within a one-quarter mile of the John F. Kennedy Middle College High School. However, proposed uses would not generate hazardous emissions or waste, or handle hazardous materials.	None required.	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
Impact HAZ-3. The project site and adjacent properties are not listed on any State or federal lists for hazardous materials or contaminated sites. Proposed residential and commercial uses would not use hazardous materials, create significant hazards, nor generate hazardous wastes.	None required.	No impact.
Impact HAZ-4. The project site is not located in the Corona Municipal Airport land use compatibility zone or influence area.	None required.	No impact.
Impact HAZ-5. Project construction activities would not require roadway closures or detours; and project operation would ensure maintenance of adequate site access for emergency vehicles. The project would not result in a roadway change that would interfere with the implementation of adopted emergency response or evacuation plans.	None required.	Less than significant.
Impact HAZ-6. The project site is not located in a Very High Fire Hazard Severity Zone nor near areas of the City with wildfire potential. The project entails development of mixed residential and commercial uses that would not directly or indirectly expose people or structures to wildfire risks.	None required.	Less than significant.
Hydrology and Water Quality		
Impact HWQ-1. Construction and operation of the project could increase erosion and stormwater runoff due to site disturbance and increased impervious surface area. Compliance with applicable regulations and policies, including preparation of a SWPPP during construction and on-site capture and treatment of stormwater runoff through biofiltration systems and detention basins during operation, would reduce water quality impacts.	None required.	Less than significant.
Impact HWQ-2. The project would not involve on-site groundwater extraction or and would be served by Norco's existing and planned supplies, reducing potential impacts to groundwater levels. Impervious surface cover would increase on the project site under the project, reducing the potential for recharge of the underlying aquifer. However, on-site runoff would continue to discharge to North Norco Channel and, ultimately, unlined portions of the Santa Ana River, where additional potential for infiltration and recharge exists.	None required.	Less than significant.
Impact HWQ-3. Under the project, stormwater runoff would be captured and treated via the proposed stormwater drainage system consisting of catchment basins, biofiltration systems, and detention basins designed to accommodate the 10-year, 24-hour storm event. The project would not result in	None required.	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
substantial off-site hydromodification impacts and would not alter the course of a river or stream.		
Impact HWQ-4. The project site is not located in a flood, seiche, or tsunami zone. Therefore, the project would not impede or redirect flood flows or risk release of pollutants due to project inundation by flood, seiche, or tsunami.	None required.	No impact.
Impact HWQ-5. The project would implement water quality best management practices in accordance with applicable local and regional requirements, reducing potential downstream water quality impacts. As such, the project would not conflict with or obstruct implementation of the Water Quality Control Plan for the Santa Ana Region. The project site overlies Temescal Subbasin, for which a Groundwater Sustainability Plan is currently being developed but has not yet been adopted. and would not conflict with or obstruct implementation of a sustainable groundwater management.	None required.	Less than significant.
Land Use and Planning		
Impact LU-1. The project would not divide an existing community.	None required.	No impact.
Impact LU-2. The current land use and zoning designations allow the proposed residential and commercial uses. The project, as proposed, is consistent with applicable policies in regional and local plans, and implementation of the project would not require a General Plan or zoning amendment.	None required.	Less than significant.
Mineral Resources		
Impact M-1 and M-2. There are no known mineral resources on the project site or in the immediate vicinity of the project site. Project uses do not include mineral extraction activities.	None required.	No impact.
Noise		
Impact N-1. Construction of the project would temporarily increase noise levels, including ambient noise, but noise levels would not exceed standards established by the City. Ambient noise on the project site and vicinity would increase from on site activities and increased traffic and increase ambient noise, but operational noise increases would not exceed standards established by the City.	None required.	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
Impact N-2. Project construction would intermittently generate groundborne vibration on a site, which may affect sensitive receptors near the project site, but would not create excessive levels of vibration that could cause structural damage, disturb sleep at nearby sensitive residential receptors, or interfere with operation of the sensitive receptors.	None required.	Less than significant.
Impact N-3. The project is not located within the vicinity of a private airstrip or an Airport Influence Area. Therefore, the project would not expose people working in the project area to excessive noise.	None required.	No impact.
Population and Housing		
Impact POP-1. The project would not directly or indirectly generate population or housing, or significant increase employment beyond expected projections.	None required.	Less than significant.
Impact POP-2. The project would not displace substantial people or housing or require construction of replacement housing.	None required.	Less than significant.
Public Services		
Impact PS-1. The Riverside County Fire Department has the capacity and facilities to serve the project, and implementation of the project would not result in the need for expanded fire protection facilities. Additionally, development impact fees would offset project demand for new fire protection facilities.	None required.	Less than significant.
Impact PS-2. Riverside County Sheriff's Department has the capacity and facilities to service the project, and implementation of the project would not result in the need for expanded police protection facilities. Project contributions to development impact fees would offset the incremental demand for new police protection facilities.	None required.	Less than significant.
Impact PS-3. Corona Norco Unified School District schools contain sufficient capacity to meet the potential demand generated by project residents. The project would contribute development impact fees to offset impacts to schools.	None required.	Less than significant.
Impact PS-4. The City maintains a high parkland to population ratio, and the project would contribute development impact fees to offset impacts to parks and recreation facilities.	None required.	Less than significant.
Impact PS-5. The project would increase the use of library facilities due to demand from project residents, and the project would contribute development impact fees to offset impacts to library facilities.	None required.	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
Recreation		
Impact REC-1 and REC-2. The project would include recreational amenities that would be privately owned and operated and would not require additional maintenance efforts from the City. Project demand for park and recreation facilities from future residents would be offset by payment of proportionate development impact fees. The project itself would not trigger the need for additional City parks and recreational facilities; nor increase the demand on existing parkland and recreational facilities or require the expansion or construction of recreational facilities.	None required.	Less than significant.
Transportation		
Impact T-1. Two project study area intersections operate at unacceptable level of service (LOS) under the Existing (2020) conditions and would continue to do so with project trips; and five project study area intersections would operate at unacceptable LOS under the Horizon year (2040) conditions based on anticipated background traffic growth. However, the project would not conflict with applicable Goals in SCAG's 2016 RTP/SCS and applicable policies in the General Plan Circulation Element.	**T-1 Intersection LOS Improvements.** The following improvements shall be implemented to ensure an acceptable LOS with project traffic: a. Hamner Avenue and Sixth Street Intersection. i. The southbound approach shall be restriped to provide dual left turn lanes, one through lane, and one shared through-right turn lane. ii. The traffic signal timing shall be modified to optimize the cycle lengths and splits during the AM and PM peak hours. iii. The northbound approach shall be restriped to provide one left turn lane, two through lanes, and one shared through-right turn lane. b. Hamner Avenue and Second Street Intersection. i. A second southbound turn lane shall be added. ii. The southbound de facto right turn late shall be striped. iii. The traffic signal to run the northbound and southbound left turns shall be modified as lead-lag, with the southbound left turn running as lag, protect the eastbound and westbound left turns, and run the eastbound and westbound left turns and lead-lag, with the westbound left running as lag. Northbound and southbound left turns shall run separately (not concurrently). iv. The eastbound approach to provide dual left turn lane, one through lane, and one shared through-right turn lane shall be restriped. v. The westbound approach to provide dual left turn lanes, one through lane, and one right turn lane shall be restriped.	Less than significant with mitigation.

Impact	Mitigation Measure (s)	Residual Impact
	c. Hamner Avenue and Third Street Intersection. i. The northbound approach shall be restriped to provide dual left turn lanes, two through lanes, and one shared through-right turn lane. ii. The southbound approach shall be restriped to provide one left turn lane, two through lanes, and one shared through-right turn lane. d. Hamner Avenue and Project Driveway 2 Intersection. i. The northbound approach shall be restriped to provide a 3rd northbound through lane. ii. The southbound approach shall be restriped to provide a 3rd southbound through lane. e. I-15 Southbound ramps and Second Street Intersection: An eastbound right turn lane shall be added.	
Impact T-2. The project meets the project type and low VMT area screening criteria in the State Office of Planning and Research Technical Advisory and the City's VMT Guidelines. The project site is located in a traffic RIVTAM Traffic Analysis Zone that contains mixed-uses similar in nature to proposed project uses.	None required.	Less than significant.
Impact T-3. Proposed driveways and vehicular, pedestrian, and equestrian circulation pathways on the project site would comply with applicable City design guidelines and proposed residential and commercial uses are permitted under existing zoning regulations and compatible with existing adjacent uses. However, improvement on and off-site would further enhance safe site access.	**T-2 Site Adjacent and Site Access Improvements.** The following improvements shall be implemented to accommodate site access and ensure project traffic impacts to existing roadways and vicinity are less than significant: a. Project Driveway 1 and Third Street Intersection. The following improvements are necessary to accommodate site access and future 95th percentile queues: i. Based on the queuing analysis of the Project Driveway 1 and site adjacent intersection of Hamner Avenue and Third Street, the existing median and westbound left turn pock shall be modified to accommodate a minimum of 60-feet of storage. ii. A stop control on the northbound approach and shared left-through-right turn lane (driveway) shall be installed. b. Hamner Avenue and Third Street. The following improvement is necessary to accommodate future 95th percentile queues: The existing median and eastbound left turn pocket shall be modified to provide a minimum of 240-feet of storage and 300-feet of storage for the	Less than significant with mitigation.

Impact	Mitigation Measure (s)	Residual Impact
	northbound left turn pockets on Hamner Avenue. c. Hamner Avenue and Project Driveway 2. The following improvements are necessary to accommodate site access: i. Restrict access to right-in/right-out/left-in only. ii. A stop control on the eastbound approach and a shared left-through-right turn lane (driveway) shall be installed. d. Third Street and Hamner Avenue. Curb, gutter, and sidewalk improvements shall be made to the Third Street and Hamner Avenue project site frontages to accommodate site access, consistent with City standards.	
Impact T-4. The project would comply with applicable City and Riverside County Fire Department requirements to maintain adequate site access for emergency responders and vehicles during proposed temporary construction activities and long-term operational uses.	None required.	Less than significant.
Utilities and Service Systems		
Impact U-1. The project would result in the relocation of electrical and telecommunications facilities and construction of new or expanded water, wastewater treatment, and stormwater drainage facilities on the project site. Proposed utilities and service system connections on site would be compatible with existing infrastructure.	None required.	Less than significant.
Impact U-2. The project would demand approximately 173.3 acre-feet of water per year, which would represent approximately 3.6 percent of Norco's projected excess water supply for all normal, single-dry, and multiple-dry year scenarios through 2040. Based on Norco's water supply and demand projections, projected water supplies are sufficient to meet the anticipated water demand of the project and reasonably foreseeable future development during normal, dry, and multiple dry years.	None required.	Less than significant.
Impact U-3. Project-generated wastewater would be treated at the Western Riverside County Regional Wastewater Authority plant. The plant would have adequate capacity to serve the project's projected wastewater generation in addition to its existing wastewater treatment commitments.	None required.	Less than significant.
Impact U-4. The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, including the El Sobrante Landfill.	None required.	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
The project would not impair the attainment of solid waste reduction goals and would comply with federal, State, and local statutes and regulations related to solid waste.		
Wildfire		
Impact WILD-1 through WILD-4. The project site is not located in or near a state responsibility area or lands classified as very high fire hazard severity zone. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan and would not impair abilities of emergency response services, including response to wildfire.	None required.	Less than significant.

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1 Introduction

1.1 Purpose and Scope

The proposed project requires the discretionary approval of the City of Norco (City); therefore, the project is subject to the environmental review requirements of the California Environmental Quality Act (CEQA). In accordance with Section 15121(a) of the CEQA Guidelines (California Code of Regulations [CCR], Title 14), the purpose of this EIR is to serve as an informational document that:

> "...will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

This EIR has been prepared as a project EIR pursuant to Section 15161 of the CEQA Guidelines. A Project EIR is appropriate for a specific development project. As stated in the CEQA Guidelines:

> "This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation."

This EIR discloses the potential environmental consequences from the implementation of the Norco Valley Square Project (hereafter referred to as the "proposed project" or "project"), a proposed mixed-use development located at the southwest corner of Hamner Avenue and Third Street in the City of Norco in Riverside County, California.

The project would be constructed on a mostly vacant 19.1-acre site that includes a recreational vehicle (RV) sales lot on a portion of the site. The project would involve demolition of the existing paved RV sales lot, and construction of a 320-unit multi-family residential complex, an 8,700-square foot (sf) food garden with outdoor entertainment and recreational uses, and a 120-room hotel development. The residential complex would include outdoor common spaces, a leasing office and fitness center, outdoor pool and spa with lounge seats, and 581 parking spaces for residential use. The project would include 211 parking spaces for the hotel and food garden, and an additional 76 parking spaces to be shared between the residential and commercial components. The project is described in detail in Section 2, *Project Description*.

This EIR is to serve as an informational document for the public and City of Norco (City) decision makers. The process will include public hearings before the Planning Commission and City Council to consider certification of a Final EIR and approval of the proposed project.

This section discusses (1) the legal basis for preparing an EIR; (2) the EIR process and comments received during public scoping; (3) the scope and content of the EIR; (4) topics found not to be significant; (5) the lead, responsible, and trustee agencies; and (6) the environmental review process required under CEQA.

1.2 Legal Authority

The City, as "lead agency," prepared this EIR in accordance with the CEQA Guidelines Sections 15000-15387 of the California Code of Regulations. The project considered in this EIR is a "project," as defined by CEQA Guidelines Section 15378, which states that an EIR must be prepared for any project that may have a significant impact on the environment. The City has determined that the project may have a significant adverse impact on the environment, and therefore, preparation of an EIR is required for project approval.

1.3 Environmental Procedure

The EIR process typically consists of three parts: the Notice of Preparation (NOP), the Draft EIR, and the Final EIR. Pursuant to CEQA Guidelines Section 15060(d), the City initiated the environmental process with the distribution of a NOP of a Draft EIR with a 30-day agency and public review period started on March 9, 2020 and ended on April 7, 2020.

The City included an announcement for a Public Scoping Meeting on the NOP, scheduled for March 26, 2020 from 5:00 p.m. to 6:00 p.m., which intended on providing information about the project to members of public agencies, interested stakeholders, and residents/community members. The meeting was to be held at Norco City Hall (2870 Clark Avenue, Norco, CA 92860). However, the Public Scoping Meeting was determined to be non-essential due to the statewide issuance of Executive Order N-33-20 by California Governor Gavin Newsom in response to the global pandemic and public health concerns caused by the coronavirus (COVID-19).

The City, as lead agency, re-evaluated the proposed project and determined that the project does not meet the definition of a "project of statewide, regional, or areawide significance" pursuant to CEQA Section 15206(b)(2), and therefore, a Public Scoping Meeting is not required for the Norco Valley Square Project, pursuant to California Public Resources Code (PRC) Section 21083.9(a)(2). The NOP was filed on March 9, 2020. Public comments were submitted via mail and email. At the close of the public review period on April 7, 2020, the City received nine written public comments via mail and/or email. The NOP and comments received are provided in Appendix A. Table 1-1 summarizes the environmental comments and where the issues raised are addressed in the EIR.

Table 1-1 Summary of NOP Comments

Commenter	Comment/Request	Relevant EIR Section
Agency Comments		
Native American Heritage Commission (NAHC)	States that the proposed project may be subject to the requirements and provisions under Assembly Bill (AB) 52 and/or Senate Bill (SB) 18 for tribal cultural resources.	Consultation required by AB 52 was carried out by the City of Norco. Subsequent issues are discussed in Section 4.4, *Cultural and Tribal Cultural Resources*, of this EIR. The Cultural Resources Assessment report is provided as Appendix E, and the AB 52 consultation records are provided as Appendix F. Consultation under SB 18 is not required for this project since the project does not include a general plan or zoning designation amendment.

Commenter	Comment/Request	Relevant EIR Section
South Coast Air Quality Management District (SCAQMD)	Recommends air quality analysis references SCAQMD's CEQA Air Quality Handbook (1993), uses CalEEMod land use emissions software, compare criteria pollutant emissions results to SCAQMD's regional and localized significance thresholds, and reference the California Air Resources Board's *Air Quality and Land Use Handbook* to discuss compatibility of existing and proposed land uses.	Project-specific air quality analysis methodology and impact analyses are included in Section 4.2, *Air Quality*, of this EIR.
	Requests calculation of construction and operational air quality impacts, including vehicular trip emissions.	Construction and operational air quality impacts are addressed in Section 4.2, *Air Quality*, of this EIR.
Riverside County Airport Land Use Commission	Project site is located outside of the airport influence area.	Comment noted. Discussion pertaining to potential project impacts to airports is included in Section 4.8, *Hazards and Hazardous Materials*, and Section 4.11, *Noise*, of this EIR.
Riverside Transit Agency	Ensure American Disabilities Act (ADA) compliant bus stop on Hamner Avenue, far side of Third Street. Ensure ADA compliant sidewalk connection on Third Street.	ADA compliance for alternative public transportation facilities is discussed in Section 4.13, *Transportation*, of this EIR.
Riverside County Department of Waste Resources	Recommends analysis of maximum amount of waste generated from project build-out.	Project impacts on solid waste are discussed in Section 4.14, *Utilities and Service Systems*, of this EIR.
	Provides useful information for solid waste impact analysis, specific to the El Sobrante Landfill, Lamb Canyon Landfill, Badlands Landfill.	
	Suggests measures to reduce project's anticipated solid waste impacts in line with Riverside County and State's waste diversion targets.	
Riverside Community College District (RCCD)	Requests construction-related and operation-related air quality and noise impacts to the Norco College campus.	Construction and operational air quality impacts are addressed in Section 4.2, *Air Quality* and Section 4.11, *Noise*, of this EIR.
	Recommends City determine air quality and noise impacts to sensitive receptors located at the Veteran's Resource Center (2001 Third Street).	Air quality and noise impacts to sensitive receptors are discussed in Section 4.2, *Air Quality* and Section 4.11, *Noise*, of this EIR.
	Requests that traffic impact analysis include potential environmental/traffic impacts to the intersection of Third Street and Hamner Avenue and provide adequate mitigation measures.	The intersection of Third Street and Hamner Avenue was included in the traffic impact analysis study area. Project traffic impacts are discussed in Section 4.13, *Transportation*, of this EIR.
	Requests that traffic impact analysis includes cumulative traffic impacts at the intersection of Third Street and Hamner Avenue, taking into account the College's future growth as outlines in the Norco College Facilities Master Plan Update and 2030 Educational Master Plan.	Cumulative traffic impacts are addressed in Section 4.13, *Transportation*, of this EIR.

Commenter	Comment/Request	Relevant EIR Section
Public Comments		
Aesthetics	Concern of loss of the City's rural atmosphere and lifestyle (i.e., open space for horses).	Aesthetic impacts of the project are addressed in Section 4.1, *Aesthetics*, of this EIR.
	Concern for privacy of adjacent existing residences due to the proposed multi-family buildings.	
Public Services	Concern for increased demand for police and fire protection services.	Project impacts to public services such as police and fire protection, and schools are discussed in Section 4.12, *Public Services*, of this EIR.
	Concern of overcrowding at K-12 schools.	
Traffic	Concern for additional traffic in the City.	Traffic impacts are addressed in Section 4.13, *Transportation*, of this EIR.
Utilities and Service Systems	Concern for water demand from proposed residential and commercial uses.	Project impacts on water and other utilities are discussed on Section 4.14, *Utilities and Service Systems*, of this EIR.

1.4 Scope and Content

The following issues were found to include potentially significant impacts and have been studied in the EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

Section 7, *Alternatives*, was prepared in accordance with CEQA Guidelines Section 15126.6 and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and two alternative development scenarios for the project site.

In preparing the EIR, use was made of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, project-specific technical reports, and other background documents. A full reference list is contained in Section 8, *References*.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. CEQA Guidelines Section 15151 provides the standard of adequacy on which this document is based as follows:

> "An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed

project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."

1.5 Issues Not Studied in Detail in the EIR

Issues not studied in detail are evaluated in Section 5, *Effects Found Not to be Significant*. The findings of this evaluation are provided in Table 1-2. Based on the analysis herein, there is no substantial evidence that significant impacts would occur in any of these issues.

Table 1-2 Issues Not Studied in the EIR

Issue Area	Summary of Findings
Agriculture and Forestry	The project site is within an urbanized area of Norco that lacks agricultural lands or forests. No impact to these resources would occur.
Mineral Resources	The project site is not associated with a significant mineral deposit or zone. No impact to mineral resources would occur.
Population and Housing	The project would involve the development of multi-family residences; however, this growth is included in the General Plan 2014-2021 Housing Element and is considered planned. The hotel and food garden would generate employment opportunities that would most likely be fulfilled by existing residents in the region. Impacts would be less than significant without mitigation. There are no housing units on the project site or people residing on the project site in any form of temporary housing. Therefore, the project would not displace any existing housing units or people; rather, the project would help the City to meet its Regional Housing Needs Allocation by providing residential units. No impact to population and housing would occur.
Recreation	The project would include outdoor recreational amenities that would be privately maintained, but accessible to Norco residents and patrons of the proposed food garden and hotel. The proposed residential use would add new residents to the City which would increase the use of local and regional parks and recreation facilities. However, the project applicant would provide Development Impact Fees that would be used towards capital improvement projects for parks and recreation facilities. Impacts would be less than significant without mitigation.
Wildfire	The project site is not located in or near a State responsibility area or lands classified as very high fire hazard severity zone. Impacts would be less than significant without mitigation.

1.6 Lead, Responsible, and Trustee Agencies

The CEQA Guidelines define lead, responsible and trustee agencies. The City of Norco is the lead agency for the project because it holds principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. Responsible agencies include the Santa Ana Regional Water Quality Control Board, which regulates water quality in the region, SCAQMD, which regulates air quality in the region, and the Western Riverside County Regional Conservation Authority, which administers the Western Riverside County Multiple Species Habitat Conservation Plan. The EIR will also be submitted to these agencies for review and comment.

A trustee agency refers to a State agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the proposed project.

1.7 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **NOP and Initial Study**. After deciding that an EIR is required, the lead agency (City of Norco) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (CEQA Guidelines Section 15082; PRC Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may, but is not required to, be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts. An Initial Study was not prepared for the project; however, all environmental issues are addressed in Sections 4 and 5 of this EIR.
2. **Draft EIR.** Public and agency review of the Draft EIR will be encouraged through distribution of the Draft EIR for at least the required 45-day public review period. Due to current circumstances associated with COVID-19 (California Executive Order N-33-20), a public meeting to present the contents of the Draft EIR will not be held.

   This EIR, as well as appendices and all supporting materials and references, can be found on the City's website (http://www.norco.ca.us/government/publicnotices.asp) during the public review period. In addition, due to current circumstances associated with COVID-19, City Hall and local public libraries are not accessible to the public for review of hard copies of the Draft EIR. Therefore, a limited number of flash drives will be made available to interested members of the public who may be unable to access the document online.

   Written comments should be submitted by mail, email or fax, with appropriate contact information, to the following:

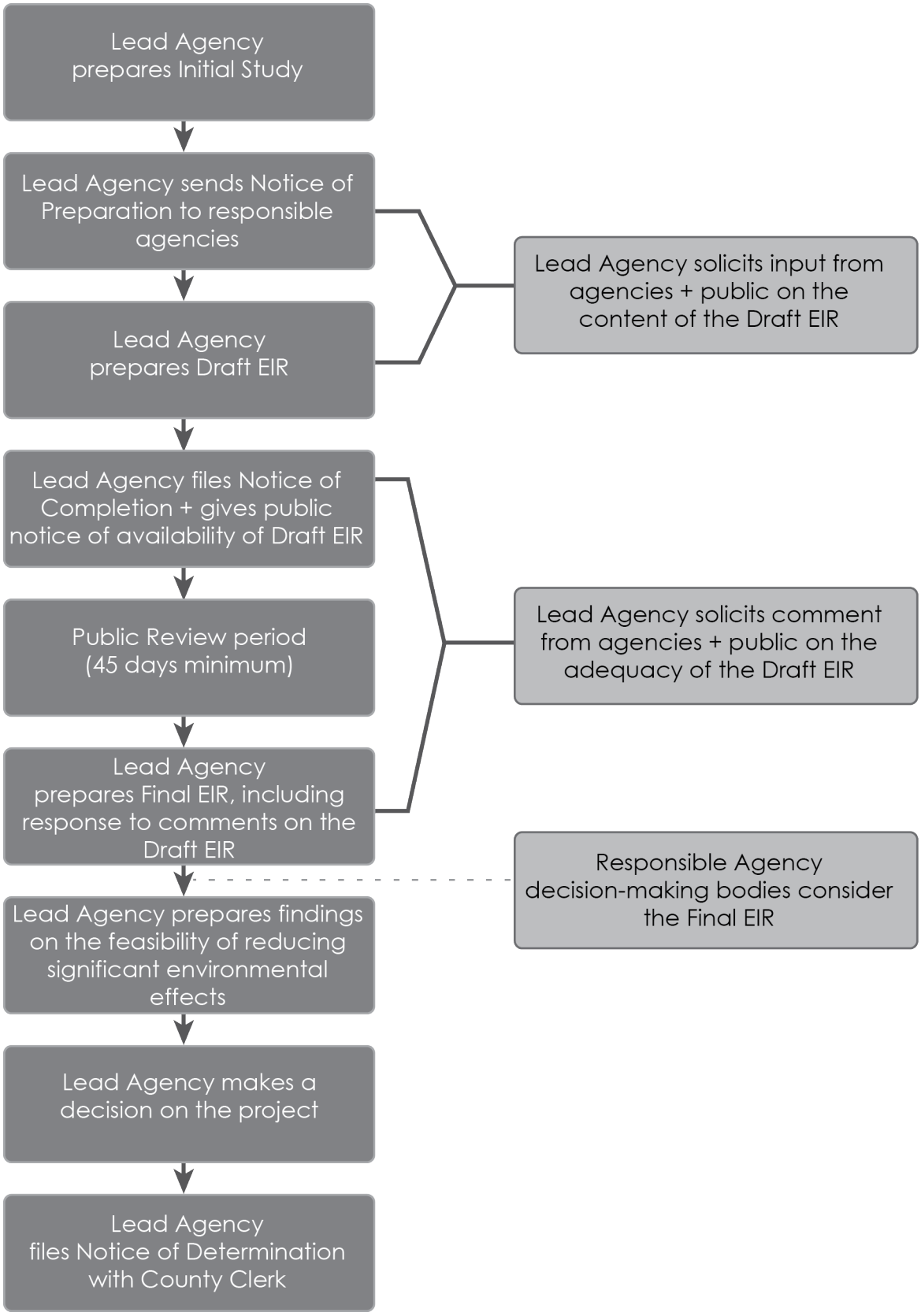
   Alma Robles, Senior Planner
   City of Norco
   Planning Department
   2870 Clark Avenue
   Norco, California 92860
   arobles@ci.norco.ca.us
   Fax: (951) 270-5619

   Any agency, organization, or members of the public desiring to comment on the EIR must submit their comments prior to the end of the public comment period.
3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (PRC Section 21092) and send a copy of the NOC to anyone requesting it (CEQA Guidelines Section 15087[a]). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: (a) publication in a newspaper of general circulation; (b) posting on and off the project site; and (c) direct mailing to owners and occupants of contiguous properties.

   The City of Norco, as lead agency, provided the NOC to OPR and circulated an NOA of the Draft EIR to public agencies, special districts, tribal representatives, organizations, and individuals that commented on the NOP and/or requested to be kept informed of the project. In addition, the City placed a public notice in a local paper of general circulation within the project vicinity.

4. **Final EIR.** A Final EIR must include: (a) the Draft EIR or revision of the Draft EIR; (b) comments received on the Draft EIR during public review; (c) list of persons and entities commenting on the Draft EIR; (d) responses to comments; and (e) other information added by the lead agency (CEQA Guidelines Section 15132). According to PRC Section 21081.6, for projects in which significant impacts would be minimized by mitigation measures, the lead agency must include a Mitigation Monitoring and Reporting Program (MMRP) with the Final EIR. The purpose of an MMRP is to ensure compliance with required mitigation measures during implementation of the project. After the Final EIR is completed, and at least 10 days prior to its certification, a copy of the response to comments on the Draft EIR will be provided or made available to all commenting parties
5. **Certification of Final EIR.** Prior to making a decision on the project, the lead agency must certify that: (a) the Final EIR has been completed in compliance with CEQA; (b) the Final EIR was presented to the decision-making body of the lead agency and the decision making body reviewed and considered the information in the Final EIR prior to approving a project; and (c) the Final EIR reflects the lead agency's independent judgement and analysis (CEQA Guidelines Section 15090[a]).
6. **Lead Agency Project Decision.** The lead agency may: (a) disapprove the project because of its significant environmental effects; (b) require changes to the project to reduce or avoid significant environmental effects; or (c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (CEQA Guidelines Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: (a) the project has been changed to avoid or substantially reduce the magnitude of the impact; (b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or (c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (CEQA Guidelines Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision (CEQA Guidelines Section 15093).
8. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects (CEQA Guidelines Section 15091[d]).
9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared. A lead agency must file the NOD with the County Clerk within five working days after approval of the project (CEQA Guidelines Section 15094[a]). The NOD must be posted for 30 days and sent to anyone previously requesting notice about the project. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (PRC Section 21167[c]). However, the statute of limitations has been extended until 90 days after the COVID-19 state of emergency is lifted, pursuant to Emergency Rules of the California Rules of Court, Emergency Rule 9, adopted effective April 6, 2020.

Figure 1-1 Environmental Review Process



2 Project Description

This section describes the proposed project, including the project applicant, the project site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

2.1 Project Applicant

Frontier Enterprises
2151 East Convention Center Way, Suite 114
Ontario, California 91764
(909) 354-8000

2.2 Lead Agency Contact Person

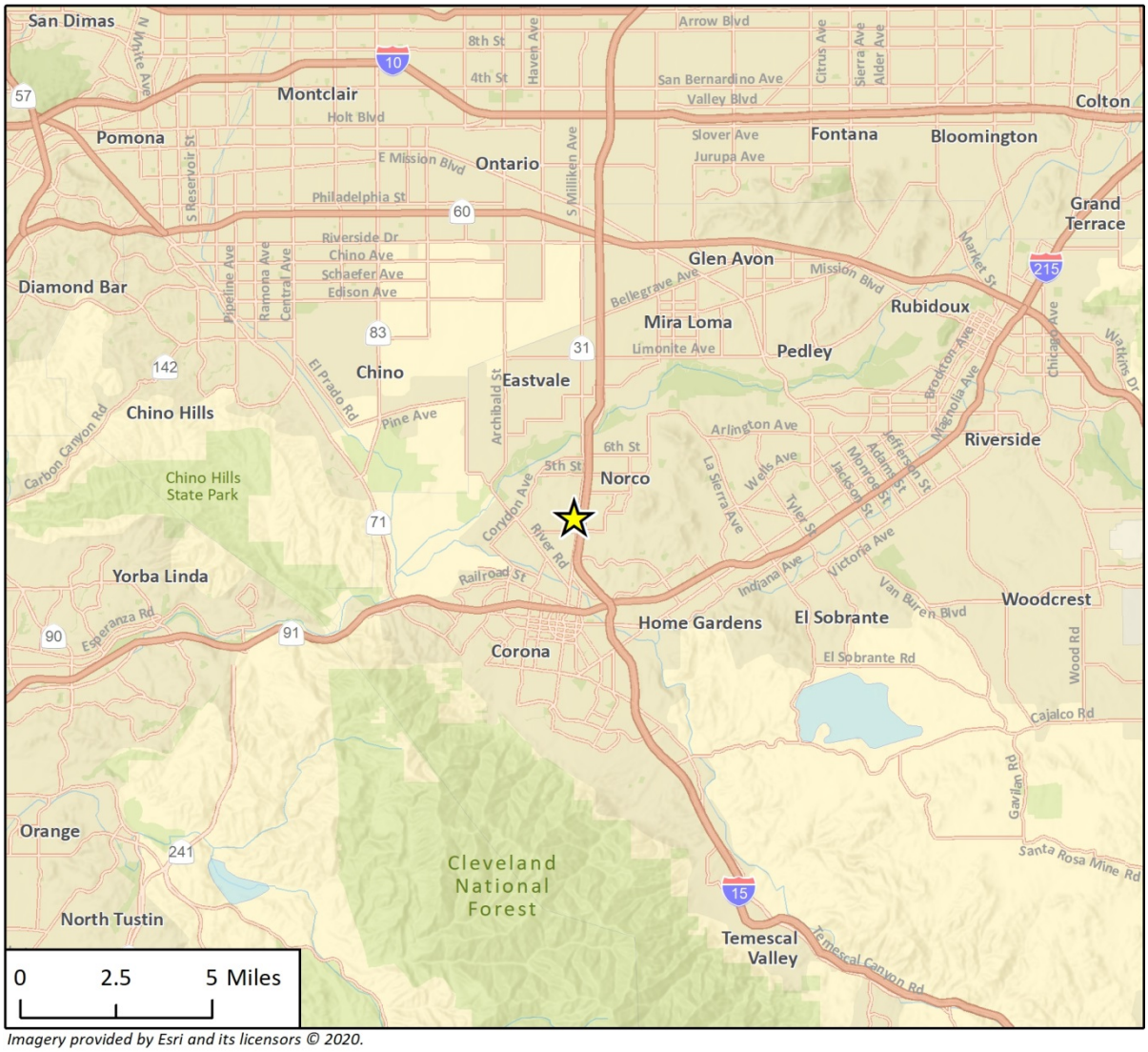
Alma Robles, Senior Planner
City of Norco
Planning Department
2870 Clark Avenue
Norco, California 92860
(951) 270-5682

2.3 Project Location

The project site is located in western Riverside County, in the south central portion of the City of Norco. The City of Norco is located approximately 40 miles east of downtown Los Angeles, 20 miles west of downtown Riverside city, and 20 miles northeast of Anaheim. Regional access to the project site is provided via Interstate 15 (I-15) with the nearest on- and off-ramps located 0.4 mile southeast (east of the Second Street and Hamner Avenue intersection), and State Route 91 (SR-91) located approximately 2.5 miles to the south. The project site is located within the Corona North USGS 7.5-Minute Quadrangle and can be located within Section 12, Township 3 South, Range 7 West of the San Bernardino Baseline and Meridian. Figure 2-1 shows the regional location of the project site.

The project site is located in the southwest corner of Third Street and Hamner Avenue and consists of three parcels totaling approximately 19.1 acres. Table 2-1 lists the project site Assessor Parcel Numbers (APNs) with associated acreage. Figure 2-2 shows the location of the project site in its neighborhood context.

Figure 2-1 Regional Location



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Project Location

N

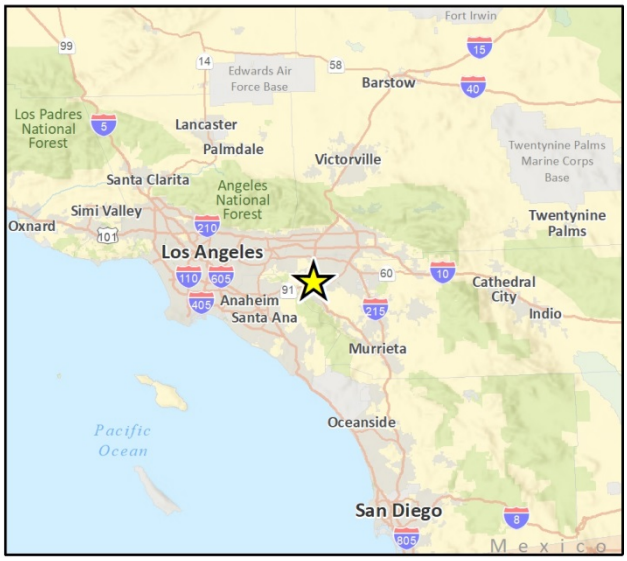


Figure 2-2 Project Site Location

Imagery provided by Microsoft Bing and its licensors © 2020.

Fig 2 Project Location

Table 2-1 Project Site Assessor Parcel Numbers

Assessor Parcel Number (APN)	Acreage
126-050-002	8.98
126-050-004	7.87
129-380-010	2.26
Total Project Site Acreage	**19.11**

Note: For the purpose of the discussion and analysis contained in this EIR, the project site acreage is rounded to 19.1 acres.

2.4 Existing Site Characteristics

The project site is mostly undeveloped. The easternmost portion of the project site, at the southwest corner of the Third Street and Hamner Avenue intersection, is currently in use as a recreational vehicle (RV) sales lot (Norco RV Center located at 2350 Hamner Avenue). The remainder of the project site contains remnants of foundations with evidence of previous grading and development but is mostly vegetated with a few scattered trees. There are no permanent structures on the project site.

2.4.1 Current Land Use Designation and Zoning

The project site has a City of Norco General Plan (Norco General Plan) land use designation of Specific Plan (SP) within the Housing Development Overlay (HDO) (City of Norco 2012a). The project site has a zoning designation of Specific Plan as it is located within the Norco Auto Mall Specific Plan Area, as well as the HDO overlay zoning designation. However, the underlying zoning designation for the project site is Commercial General (C-G) (City of Norco 2012b, 2018b).

2.4.2 Surrounding Land Uses

The project site is bordered by existing commercial development to the north and east, commercial, and residential development to the south, and residential and institutional development to the west. Commercial uses located to the north, east, and south of the project site contain a mix of automotive, food, and office services as well as an indoor playground for children. The Calvary Chapel Norco is located in the northeast corner of the Third Street and Hamner Avenue intersection. An open drainage channel is located adjacent to the southeastern corner of the project site. A majority of the existing residential uses located to the south and west of the project site are single-family residences along Paddock Lane and Mountain Avenue, respectively. Institutional uses in the vicinity of the project site include the John F. Kennedy Middle College High School located on the north side of Third Street to the northwest of the project site, and the Norco College Science, Technology, Engineering, and Math (STEM) Center to the west of the project site. Table 2-2 details the surrounding land use pattern and land use regulatory designations.

Table 2-2 Surrounding Land Use Designations

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	RV sales lot in northeast corner, remainder vacant land	SP (Specific Plan), HDO Overlay	SP (Specific Plan), HDO Overlay, with underlying C-G (Commercial General)
North	Commercial (automotive, office commercial services, retail) and community (church)	CC (Commercial Community)	C-G (Commercial General)
East	Commercial (automotive, services, and food service)	SP (Specific Plan)	SP (Specific Plan)
Southeast	Commercial (automotive and food service)	SP (Specific Plan)	SP (Specific Plan)
Southwest	Single-family residential	RA (Residential Agricultural)	A-1-20 (Agricultural – Low Density 20,000 square feet)
West	Institutional (college campus)	PL (Public Lands)	OS (Open Space)

2.5 Project Characteristics

The proposed mixed-use project would consist of multi-family residential dwelling units, a hotel development, a food garden, and intermittent outdoor entertainment and recreation amenities. The residential portion of the project would be constructed on approximately 11.3 acres on the western half of the project site. The hotel development, food garden, and outdoor entertainment and recreation space would be constructed on approximately 7.6 acres on the eastern half of the project site. Figure 2-3 shows the site plan and layout of the proposed project.

The project would provide an additional source of revenue to the City through property, sales, and transient occupancy taxes. The project would bring additional jobs to the City and provide regional community entertainment and recreational amenities to the surrounding neighborhood. Additionally, the hotel development would provide visitor-serving accommodations in the City.

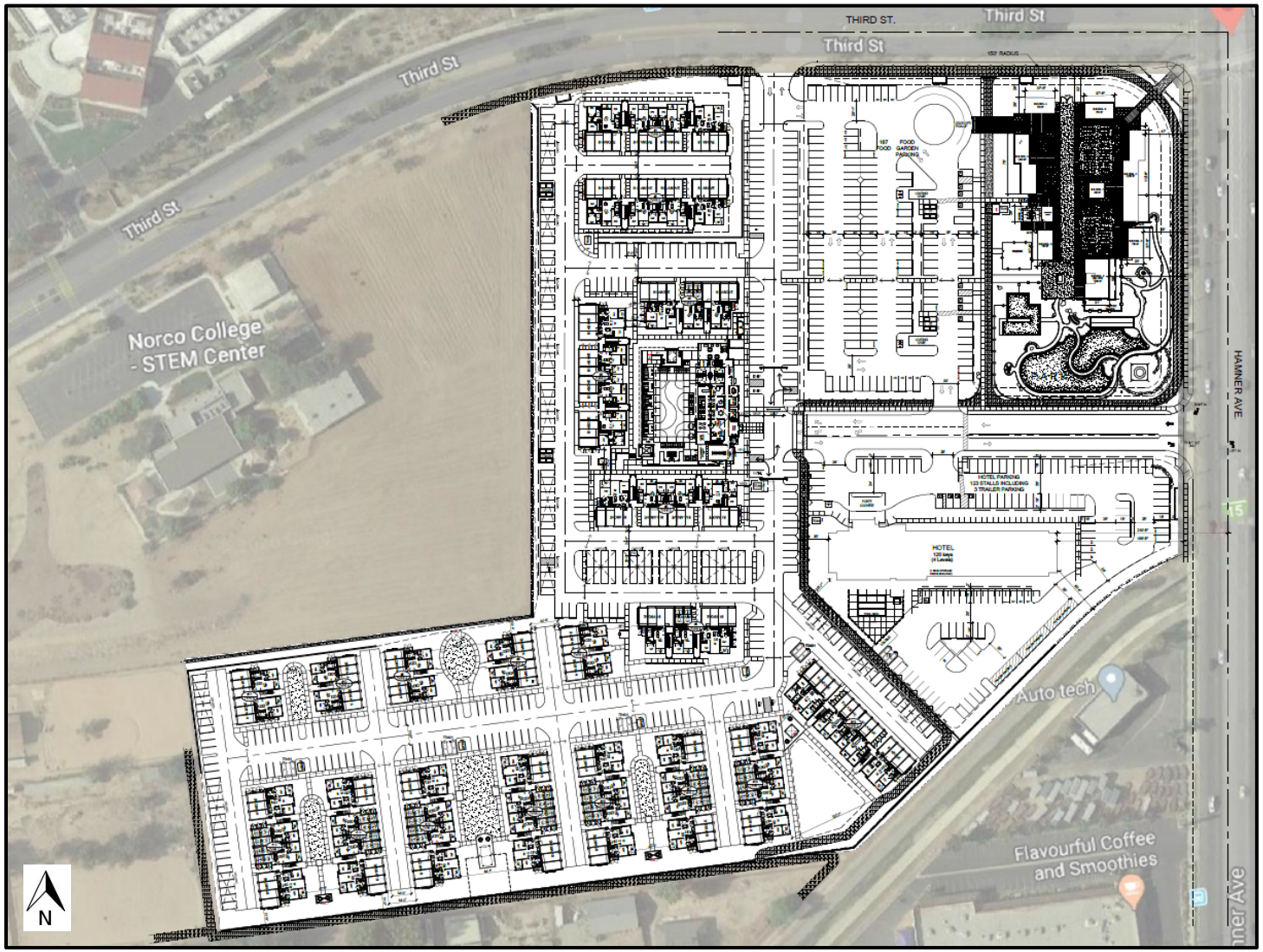
The outdoor entertainment amenities would be used intermittently, based on approvals by the City of temporary use and/or special events permits. The outdoor recreation amenities (e.g., farmers market and food stands, artist exhibit area, bocce courts and lawn game areas, open space park, and horse paddock) would be open to public use on a first-come first-serve basis, generally between the hours of 7:00 a.m. to 11:00 p.m.

The proposed site plan, floor plans, elevations, and landscape plans are included in Appendix B of this document.

2.5.1 Residential Component

The residential component of the project would be on approximately 11.3 acres on the western half of the project site, and would include 320 one-, two-, and three-bedroom multi-family residential units in 19 three-story buildings. This would amount to a density of approximately 29 dwelling units per acre, and an average unit size of 913 square feet (sf). All residential units are intended to be provided at market rate. The residential component of the development would incorporate several amenities, including one clubhouse, fitness center, leasing office, and lounge area totaling up to

Figure 2-3 Proposed Site Plan



Note: Above figure is not to scale. Please refer to project site plans, included in Appendix B.
Source: Architects Orange 2020.

13,407 sf, which would include an outdoor pool and spa. Approximately 166,000 sf of landscaped outdoor common space and walkways for recreational use would be provided for residents. Residential building finishes would consist of stucco and siding with metal panels, glass, and wood accents.

Of the 320 units, 176 residential units would be one-bedroom/one-bathroom, ranging from 729 sf to 748 sf. 135 of the residential units would be two-bedroom/two-bathroom, ranging in size from 1,010 sf to 1,054 sf. The remaining nine residential units would be three-bedroom/three-bathroom, 1,284 sf each. Table 2-3 provides a summary of the residential unit mix provided as part of the project.

Table 2-3 Residential Unit Details

Unit Types	Number of Units	Percentage of Total Unit Count	Unit Size (sf)
1-bedroom	150	47%	729-748
2-bedroom	155	48%	1,010-1,054
3-bedroom	15	53%	1,284
Total	**320**	**100%**	**Average: 913**

Residential Parking

Pursuant to Chapter 18.38 of the City of Norco, which contains off-street parking standards, multi-family residential developments require no less than two roofed parking spaces per dwelling unit. Therefore, a total of 652 off-street parking spaces would be required for the proposed 320 residential units.

The project would provide the residential portion of the project with 581 parking spaces with 76 guest parking spaces to be shared with the proposed commercial uses. The 581 residential parking spaces would be comprised of 197 single car garages, 134 roofed carports, and 250 surface parking spaces. Of the 581 residential parking spaces, 10 parking spaces would be ADA-compliant. Therefore, the project would provide 1.8 parking spaces per dwelling unit, which is below the City's off-street parking standards. However, the addition of the 76 guest parking spaces to be shared with the proposed commercial uses would ensure the project provides a total of 657 off-street parking spaces available for the residential component of the project.

The residential parking areas would be accessed through the main access from Hamner Avenue, and through the secondary access from Third Street. Table 2-4 provides a summary of the residential parking provided as part of the project.

Table 2-4 Residential Unit Parking Requirements

Number and Type of Unit	Required Parking Ratio (spaces per unit)	Parking Spaces Required	Parking Spaces Provided
150 one-bedroom units	2.0	300	Total Residential: 581 Total Guest: 76
155 two-bedroom units	2.0	310	
15 three-bedroom units	2.0	30	
Total	**2.0**	**640**	**657**

2.5.2 Commercial Component

The commercial component of the project would be on approximately 7.6 acres located in the eastern half of the project site. The proposed food garden would be located in the northeast corner of the project site, with high visibility from Third Street and Hamner Avenue. The food garden would have a western town theme and aesthetic, comprised of eight buildings with outdoor dining and landscaped soft-seating (lawn seating) areas. The food garden would generally operate from 7:00 a.m. to 11:00 p.m. Outdoor amenities would be available for use during food garden operation hours, though outdoor entertainment events would be based on approvals by the City of temporary use and/or special events permits. Figure 2-4 provides a close-up of the proposed food garden area and proposed building configuration, and Table 2-5 provides a summary of the food garden structures and dining areas provided as part of the project.

Table 2-5 Food Garden Details

Building	Square Footage (sf)	Seating Capacity
A (Food)	750	N/A
B (Food)	750	N/A
C (Food)	2,250	N/A
D (Food)	750	N/A
E (Saloon)	1,550	(see Outdoor Seating below)
F (Food)	400	N/A
G (Food)	750	N/A
H (Food)	1,500	N/A
Outdoor Seating (Building E, Saloon)	1,440	96 guests (15 sf/guest)
Dining Area 1	2,128	142 guests (15 sf/guest)
Dining Area 2	2,128	142 guests (15 sf/guest)
Soft Seating Area 1 (landscaped)	544	17 guests (30 sf/guest)
Soft Seating Area 2 (landscaped)	879	30 guests (30 sf/guest)
Total	**Buildings** **8,700 sf**	
	Outdoor Seating & Dining **5,696 sf**	
	Soft Seating **1,423 sf**	

The proposed hotel development would be located in the southeastern portion of the project site and total up to 70,000 sf within a four-story building with 120 rooms. The hotel would have a western theme and aesthetic for visual compatibility with the proposed food garden and existing surrounding uses. The hotel would be visible from Hamner Avenue. The hotel development would operate 24 hours a day.

Figure 2-4 Close-Up of Proposed Food Garden

COMMERCIAL	
Food Garden and Park	4.75 ac
Hotel	2.81 ac
Total Commercial	**7.56 ac**
FOOD GARDEN BUILDINGS	
Building A (Food)	750 sf
Building B (Food)	750 sf
Building C (Food)	2,250 sf
Building D (Food)	750 sf
Building E (Saloon)	1,550 sf
Building F (Food)	400 sf
Building G (Food)	750 sf
Building H (Food)	1,500 sf
Gross Leaseable Area	**8,700 sf**
Building X (Restrooms, Maintenance, Tenants Bike Storage)	*±800 sf*

Commercial Parking

Pursuant to Chapter 18.38 of the City of Norco, commercial uses such as the proposed food garden require no less than one parking space per 100 square feet of gross floor area; and the proposed hotel development requires one parking space for each guest room. Therefore, a total of 87 parking spaces are required for the proposed food garden, and 120 parking spaces are required for the proposed hotel development.

The project would provide the commercial portion of the project with 91 parking spaces for food garden use, 120 parking spaces for hotel use, and 76 guest parking spaces to be shared with the proposed residential uses[1]. Of the 211 parking spaces provided for commercial uses, 17 spaces would be ADA-compliant. All parking spaces for the proposed commercial uses would be uncovered surface spaces on the project site. The food garden and parking area would be accessed from Hamner Avenue and Third Street. Table 2-6 provides a summary of the commercial parking provided as part of the project.

[1] The number of shared parking spaces (76 spaces total) is based on the provision of 0.18 spaces per proposed residential unit for guest parking (320 units x 0.18 guest/shared parking spaces ≈ 59 guest/shared parking spaces, plus 17 additional spaces). This configuration was determined by the project proponent to provide the optimal number of parking spaces for all proposed uses, while decreasing garage/carport clutter and ensuring safe accessibility and circulation on the project site.

Table 2-6 Commercial Parking Requirements

Type of Use (and sf)	Required Parking Ratio	Parking Spaces Required	Parking Spaces Provided
Food Garden (8,700 sf)	1: 100 sf	87	91
Hotel (70,000 sf; 120 rooms)	1: 1 room	120	120
Additional Guest Parking[1]	–	–	76
Total		207	287

[1] 76 guest parking spaces to be shared between proposed residential and commercial uses.

2.5.3 Outdoor Entertainment and Recreation Components

The project would include an outdoor entertainment and recreation area in the northeastern portion of the project site to serve as community gathering space for events such as farmers markets, food trucks, and artist exhibits. The food garden would contain approximately 118,800 sf of outdoor space, which would include a restroom and storage kiosk (800 sf) for customers and site maintenance crew, respectively. Recreational components in the outdoor area would include bocce court and lawn games, a stage for live performances, an open space park, horse paddock, and an equestrian trail.

The equestrian trail would be along the frontage of Third Street, connected to an existing trail that runs east-west along Third Street; along most of the frontage of Hamner Avenue, wrapping around the proposed park space and water tower by the proposed Hamner Avenue entrance; and wrap around the west boundary of the proposed food garden area with access to the proposed horse paddock. The equestrian would continue along the northside of the proposed Hamner Avenue entrance, with a southbound turn behind the proposed hotel, a southeast bound turn between the row of proposed residential parking and hotel parking, and a westbound turn along the southern boundary of the project site where the proposed trail would connect to an existing equestrian trail that connects to Mountain Avenue. The proposed equestrian trail would be 12 feet wide along Hamner Avenue pursuant to the City's trail standards and Trail Master Plan (City of Norco 2018a).

Farmers markets, live entertainment, and special events would create a lively community atmosphere for proposed residents and the surrounding community. These events would be held intermittently on weekly and/or monthly basis, given approvals by the City of temporary use and/or special events permits. Farmers markets are anticipated to occur once a week in the food garden. Live entertainment would be situated on the proposed stage in the food garden area. These live entertainment events would occur occasionally throughout the week, and would be conditioned to comply with the City of Norco's Noise Ordinance. Special events would vary throughout the year in the food garden. An example of a special event would be an autumn-themed festival with pop-up shops featuring local stores and businesses with a petting zoo area. All publicly accessible outdoor and recreational uses would occur in the designated northeastern portion of the project site. The commercial parking spaces would be used by those visiting the project site for outdoor and recreational uses.

2.5.4 Green Building and Design Features

The project would implement green building and sustainable design features with the intent of reducing project energy needs and greenhouse gas emissions. These features would be incorporated into all proposed project buildings and would comply with the California Green

Building Standards Code ([CALGreen]; California Code of Regulations, Title 24, Part 11) as implemented by the City of Norco. The following features would be included as part of the project:

- Buildings would employ energy and water conservation measures in accordance with CALGreen standards. This includes design considerations related to the building envelope; heating, ventilating, and air conditioning; LED lighting; individual water-use monitoring for proposed dwelling units; and power systems.
- Construction materials and interior finish products with zero or low emissions and low volatile organic compounds would be used to reduce indoor air quality impacts.
- Proposed landscaping throughout the project site and parking areas would include drought-tolerant plants, water-efficient irrigation systems, such as weather-based and soil-moisture-based irrigation controllers and sensors according to the California Department of Water Resources Model Efficient Landscape Ordinance.
- Project operations would include a recycling program in order to meet a 50 percent minimum waste diversion goal, consistent with statewide and citywide waste reduction goals.

Additionally, a package delivery concierge service, with package lockers, would be provided as part of the proposed residential development. This would create a one-stop pick-up and drop-off location for packages, reducing the need for idling delivery trucks throughout the residential development. Proposed green building features are discussed further in Section 4.5, *Energy*.

2.5.5 Open Space, Landscaping, and Design Components

The residential component of the project would include a combination of private and common open space, designed pursuant to City of Norco open space requirements. The proposed residential dwelling units include 54 to 110 sf of private outdoor space for each unit (averaging 75 sf) in the form of patios or balconies. Private outdoor patio and balcony space would total 24,129 sf across the 320 proposed residential units.

The residential component would also include approximately 166,000 sf of common outdoor space, equaling approximately 519 sf per dwelling unit. The common open space areas would include low-water landscaping and lawn/turf areas for outdoor activities, exclusively for use by project residents. Additional shared residential amenities would include the clubhouse, fitness center, and outdoor pool and spa with lounge seats.

The food garden and hotel buildings would have a western town theme and aesthetic. Building finishes for proposed food garden structures would consist of stucco, siding, metal panels, glass, and reclaimed wood; with metal roofs and/or asphalt shingles. Building accents would consist of painted exposed steel structures, wood posts and trellis, and composite wood. Proposed hotel building finishes would primarily consist of stucco, siding, metal panels, and glass, with a metal or asphalt shingle roof and composite wood accents.

Common space throughout the commercial components would include landscaped areas by the outdoor entertainment and recreation area in the northeast portion of the site by the proposed food garden (detailed in Section 2.5.3, *Outdoor Entertainment and Recreation Area*), and landscaped areas around the perimeter of the proposed hotel building. These outdoor spaces would be maintained by the property owner, and accessible by patrons of the food garden and hotel as well as the Norco community. The outdoor entertainment and recreation area would include public gathering spaces such as lounge areas with fire pits, kiosks, and dining tables with seating. The food

garden would contain a total of approximately 118,800 sf of outdoor space, and the hotel would contain a total of approximately 37,800 sf of landscaped outdoor space.

Landscaping throughout the project site would consist of a variety of California native and non-native plants, and low water use trees, shrubs, and ground cover; these are detailed in the plans located in Appendix B. Large trees are proposed along the perimeter of the site as well as along the on-site circulation pathway west of the proposed residential component. Trees of varying sizes are proposed within parking lot planters and throughout the common open space areas for the residential and commercial components. Trees included in the proposed landscape plan consist of Chitalpa, magnolia, California sycamore, and Mexican elderberry. Groundcover, shrubs, and accent plans are proposed along walkways, throughout the residential common open space areas, and in the commercial gathering areas, seating areas, and courtyards. The plans include decorative crosswalks, paving, and seating furniture for the residential and commercial areas.

The project proposes placement of a two-rail wooden horse fencing along Hamner Avenue and Third Street, consistent with City roadway and trail design standards. The wood fencing would provide a physical demarcation of the proposed equestrian trails fronting Hamner Avenue and Third Street, and serve as a visual cue for roadway traffic of the potential presence of horses, riders, and pedestrians.

A six-foot high tubular steel fence with dense landscaping would be placed along the western property line between the project site and existing residences and the Norco College STEM Center, which would provide privacy between the proposed multi-family units and the existing single-family residences to the west. A solid six-foot high precast concrete wall, accented to look like wood textured finish, would be placed along the southern boundary of the project site to ensure privacy between the proposed multi-family units and the existing single-family residences to the south; a small portion of the southern boundary fence located near Hamner Avenue would consist of six-foot high tubular steel fencing for security and site visibility near the street and from the hotel parking lot.

Additional fencing would be placed throughout the project site, such as a four-foot high vinyl coated chain link fence around the proposed dog park for residential use; a four-foot high white picket fence around the outdoor seating area in the proposed food garden; and seven-foot high security fencing between select food garden buildings. A description and placement of the proposed fencing materials are included in Appendix B.

All of the fences and walls would enhance the aesthetics of the project and vicinity, while providing security, clarifying residential and commercial spaces, and ensuring privacy for project residents and hotel guests.

2.5.6 Parking, Site Access, and On-Site Circulation

As stated above in Sections 2.5.1, *Residential Component*, and 2.5.2, *Commercial Component*, the project would provide a total of 581 parking spaces for residential uses, 211 parking spaces for commercial uses, and 76 parking spaces to be shared for all proposed uses. No underground parking is proposed. A total of 27 parking spaces would be ADA-compliant (10 spaces for residential use and 17 spaces for food garden and hotel use) and 15 anchored bicycle racks would be installed for bicycle parking (9 racks for food garden use and 6 racks for hotel use). Of the 76 shared parking spaces, 17 spaces would be reserved for electric vehicle (EV) charging (10 EV spaces for food garden use and 7 EV for hotel use), and 27 spaces would be reserved for fuel efficient vehicles and/or

vanpools (16 efficiency/vanpool spaces for food garden use and 11 efficiency/vanpool spaces for hotel use).

The main driveway for the project site would be located on Hamner Avenue, and the secondary access point would be located on Third Street. The main circulation flow would be via the main driveway on Hamner Avenue, which would provide access for all proposed uses. Secondary access would be from the Third Street driveway, which would primarily provide access to the proposed residential development and food garden. Hamner Avenue and Third Street have existing curb cuts where proposed driveways would be placed. Pedestrian access points would be located along Third Street just west of the food garden, and on both sides of the main driveway located on Hamner Avenue.

2.5.7 Utilities

Utility services are discussed in Section 4.14, *Utilities and Service Systems*. The following public utilities providers would serve the project site and proposed uses:

- City of Norco, Public Works Department and Western Riverside County Regional Wastewater Authority would provide sewer system services
- City of Norco, Water Utility Division would provide potable water services
- Southern California Edison would provide electricity services
- Southern California Gas would provide natural gas services
- Waste Management would provide trash and recycling services

2.5.8 Off-site Improvements

Grading within the City's right-of-way along Hamner Avenue and Third Street would occur during site preparation and grading to implement the proposed driveways along with construction of additional curb, gutter, and sidewalk improvements needed for vehicular and multi-modal (pedestrian, bicycle, and equestrian) access. The work within the City's right-of-way would require an encroachment permit. The existing median along Third Street would be modified to provide 100-feet of storage for the westbound left turn pocket at the proposed Third Street driveway; the existing median along Hamner Avenue would also be modified to provide 200-feet of storage for the eastbound left turn pocket at Hamner Avenue.

2.5.9 Construction and Grading

Construction of the project is expected to occur over approximately 42 months. Construction activities would be separated into three phases:

- Phase I: Includes site preparation and grading for the entire project site, as well as installation of wet and dry utilities and asphalt paving for apartments and food garden. Phase I would take nine months total.
- Phase II: Includes building construction and architectural coating for apartment and food garden parcels of the project site. Phase II would occur for 24 months total and may overlap with Phase I.
- Phase III: Includes building construction, architectural coating, installation of wet and dry utilities, and asphalt paving for hotel parcel of project site. Phase III would occur for approximately 30 months and may overlap with Phase II for up to 24 months.

During the grading phase, the maximum depth of excavation would be approximately 30 feet, and the total amount of excavated soil would be approximately 60,000 cubic yards. No soil would be exported from the project site since it would be used as fill and balanced on site. Construction equipment for the project would include earthwork equipment such as graders, rollers, and cranes, as well as small hand and power tools.

2.6 Project Objectives

The project intends to achieve the following objectives:

1. To be consistent with the City's Housing Development Overlay, General Plan, zoning code, Norco Auto Mall Specific Plan, and the City's Strategic Plan.
2. To create a mixed-use, small-town village experience by combining residential, dining, hospitality, and gathering spaces that complement the City's equestrian lifestyle.
3. To promote the use of alternative modes of transportation such as horseback riding, biking, and walking between the project site and existing adjacent uses.
4. To use existing land resources more efficiently by providing a well-planned, infill project next to an established corridor on an underutilized, vacant site.
5. To diversify the City's economy with a project that:
    a. Provides new housing options for Norco residents, and attracts and maintains working professionals, families, Veterans, and retirees to achieve the goals of the City's General Plan Housing Element and towards meeting the City's Regional Housing Needs Allocation.
    b. Enhances public services and allows the City to be more fiscally sound by capturing additional transit occupancy tax revenues by leveraging the project site's prime location near I-15, job centers, and SilverLakes Park.
    c. Provides more amenities for local residents, workers, and visitors in the form of a food garden with outdoor entertainment, recreational amenities such as equestrian and pedestrian trails, play areas, and a public gathering space available for all Norco residents.

2.7 Required Approvals

The project would require the following City approvals and entitlements, along with standard building and grading permits:

1. **Development Agreement.** A Development Agreement would provide methods for financing, acquisition, and construction of infrastructure to implement the proposed project, and providing vested rights to develop the project, pursuant to the approved development entitlements.
2. **Site Plan Review.** The proposed site plan review would include the project site plan, overall site design, project site layout, architectural quality of proposed buildings and structures, and would ensure the project is consistent with the HDO, Auto Mall Specific Plan, and City development standards.
3. **Tentative Parcel Map.** One tentative parcel map is proposed to subdivide the project site into eight parcels that consist of six parcels for the proposed multi-family residences, construction phase and financing; one parcel for the proposed food garden; and one parcel for the proposed hotel.

4. **Conditional Use Permit.** The project is seeking approval of a Conditional Use Permit (CUP) pursuant to City of Norco Municipal Code Chapter 18.64, pertaining to the HDO and Auto Mall Specific Plan to permit each of the following uses: hotel development, food garden, community gathering space.
5. **Environmental Impact Report (EIR).** A project-specific EIR is required to analyze the potential environmental impacts of project implementation.

In addition, the project would require the following ministerial approvals:

- Issuance of demolition permit
- Issuance of grading permit
- Issuance of building permits
- Issuance of encroachment permits

The following approvals are anticipated from responsible agencies:

- **Federal Emergency Management Agency (FEMA).** Issuance of Conditional Letter of Map Amendment and Letter of Map Amendment to the Flood Insurance Rate Map.
- **South Coast Air Quality Management District (SCAQMD).** Issuance of air quality permits for proposed demolition and construction activities.
- **Santa Ana Regional Water Quality Control Board (RWQCB).** Issuance of a 401 Water Quality Certification permit, a National Pollutant Discharge Elimination System (NPDES) Permit, and a Construction General Permit.

The project would require the following consultation processes in order to move forward:

- **Assembly Bill (AB) 52.** Pursuant to AB 52, the project would be required to notify and consult with local tribes who requested notification from the City for projects subject to CEQA. One tribe requested consultation under AB 52 (the Soboba Band of Luiseño Indians). Information pertaining to the AB 52 consultation process for this project is included in this EIR as Appendix F.

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3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The project site is located in the City of Norco, approximately 0.8 mile south of City Hall. The site is located in the southwest corner of Third Street and Hamner Avenue. The approximately 19.1-acre project site is mostly undeveloped, and the easternmost portion of the project site is currently in use as an RV sales lot. Figure 2-1, *Regional Location*, and Figure 2-2, *Project Site Location*, show the location of the project site in the region and the project site in relationship to the surrounding neighborhood, respectively.

A grid system of east-west and north-south roadways, including arterials, collectors, and local streets, provide vehicular access throughout the City. The major roadways in the project site vicinity include Hamner Avenue, Second Street, and Fourth Street. The closest freeways are Interstate 15 (I-15) and California State Route 91 (SR-91). I-15 is located approximately 800 feet east of the project site, and SR-91 is located over two miles south of the project site.

The Mediterranean climate of the region and the coastal influence produce moderate temperatures year-round with rainfall concentrated in the winter months. The site is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Existing air quality conditions in the area are discussed in Section 4.2, *Air Quality*. The City of Norco is located approximately 30 miles inland from the coastline of the Pacific Ocean.

3.2 Project Site Setting

As shown in Figure 2-2 in Section 2, *Project Description,* and discussed in Section 2.4.2, *Surrounding Land Uses*, the project site is bordered by existing commercial development to the north and east, commercial and residential development to the south, and residential and institutional development to the west. Commercial development located to the north and east are comprised of one- and two-story office and retail buildings. Institutional development located to the west of the project site contains one-story buildings, and residential development located the south and west are mostly one-story residences.

As stated above, the project site is mostly undeveloped, and the easternmost portion of the project site is currently in use as an RV sales lot. The project site contains remnant building foundations from previous uses (further discussed in Section 4.4, *Cultural and Tribal Cultural Resources*). Remnant building foundations and the existing paved parking area of the RV sales lot would be removed during site preparation and grading as part of the project.

As discussed in Section 2.4.1, *Current Land Use Designation and Zoning*, the project site has a City of Norco General Plan land use designation of Specific Plan (SP) within the Housing Development Overlay (HDO). The project site has a zoning designation of Specific Plan (SP) as it is located within the Norco Auto Mall Specific Plan Area, as well as the HDO overlay zoning designation. However, the underlying zoning designation for the project site is Commercial General (C-G). Uses permitted in

the HDO overlay zoning designation allow residential development at 20-30 dwelling units per acre, and the C-G zone allows retail and commercial uses as proposed under the project (further discussed in Section 4.10, *Land Use and Planning*).

3.3 EIR Baseline

CEQA Guidelines Section 15125 states that an EIR "must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation [NOP] is published." Section 15125 states that this approach "normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant."

This EIR evaluates impacts against existing conditions, which are generally conditions existing at the time of the release of the NOP (March 2020). It was determined that a comparison to current, existing baseline conditions would provide the most relevant information for the public, responsible agencies and City decision-makers. For some issue areas, this EIR also includes consideration of impacts against a forecast future baseline condition in addition to the current baseline conditions, controlling for impacts caused by population growth and other factors that would occur whether or not the proposed project is approved. For certain issue areas (including air quality, energy, greenhouse gas emissions/climate change, noise, and transportation/circulation), impacts would occur as a result of background population growth, urbanization, and volume of average daily traffic increases in the region that would occur by 2040, with or without implementation of the project. Thus, for these issue areas, a comparison to a future 2040 baseline is provided for informational purposes. However, all impact determinations are based on a comparison to existing 2020 baseline conditions.

On March 4, 2020 the Governor proclaimed a State of Emergency in California as a result of the threat of Coronavirus 2019 (COVID-19). The Riverside County Public Health Officer issued school closures and the closure of County buildings prior to the Governor's "Shelter In Place" Executive Order N-33-20 went into effect on March19, 2020. The threat of COVID-19, as well as the subsequent State and County proclamations and orders, have resulted in temporary changes to the existing economic and physical conditions in California and Riverside County regionally and in the City of Norco locally. Temporary changes to existing environmental conditions have included reduced vehicle traffic and associated noise and pollutant emissions, and reduced electricity consumption. In addition, the timing and likelihood of cumulative development and regional buildout assumptions may be affected during or after the threat of COVID-19. The magnitude and duration of the State of Emergency and associated State and County orders, or future orders related to the threat of COVID-19, cannot be ascertained. Accordingly, the effect of COVID-19 on baseline and future environmental conditions effects of COVID-19 is currently speculative. CEQA Guidelines Section 15064(d)(3) states that:

> An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable.

Furthermore, CEQA Guidelines Section 15154 states that:

> If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

It would be speculative for the EIR to assume what changes to baseline or cumulative baseline conditions might occur as a result of COVID-19 or the subsequent State and County proclamations and orders. Therefore, this topic is not discussed further in the EIR.

3.4 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects in Norco and surrounding areas, including the City of Eastvale and the City of Corona, are listed in Table 3-1 and shown in Figure 3-1. These projects are considered in the cumulative analyses in Section 4, *Environmental Impact Analysis*.

Table 3-1 Cumulative Projects List

Project Number and Location		Land Use[1]	Quantity	Units[2]
City of Norco				
N1	SilverLakes Equestrian	The Field House Restaurant	250	Seats
		Stadium	5,000	Seats
N2	River Road and Corydon Street Commercial Center	General Office	22,000	TSF
		Shopping Center	13,709	TSF
		Supermarket	44,200	TSF
		Pharmacy w/ Drive-Through	14,576	TSF
		Coffee Shop w/ Drive-Through	2,000	TSF
		Fast-Food w/o Drive-Through	7,883	TSF
		Fast-Food w/ Drive-Through	5,978	TSF
		Gas Station w/ Convenience Market	12	VFP
N3	SWC Horseless Carriage Drive/Fifth Street	Warehousing	414,431	TSF
N4	SEC of Hamner Avenue/Fifth Street	Hotel	90	RM
N5	3275 Hamner Avenue	Hotel	122	RM
N6	SEC of Sierra Avenue/Sixth Street	Commercial	37,571	TSF
N7	Norco Carmax	Automobile Sales (used)	11,447	TSF
N8	Palomino Business Park	High-Cube Cold Storage Warehouse	602,130	TSF
		Industrial Park	1,426,460	TSF
		Commercial Retail	6,520	TSF
		Fast-Food w/o Drive-Through	6,520	TSF
		Gas Station w/ Market	12	VFP
		Fast-Food w/ Drive-Through	4,275	TSF

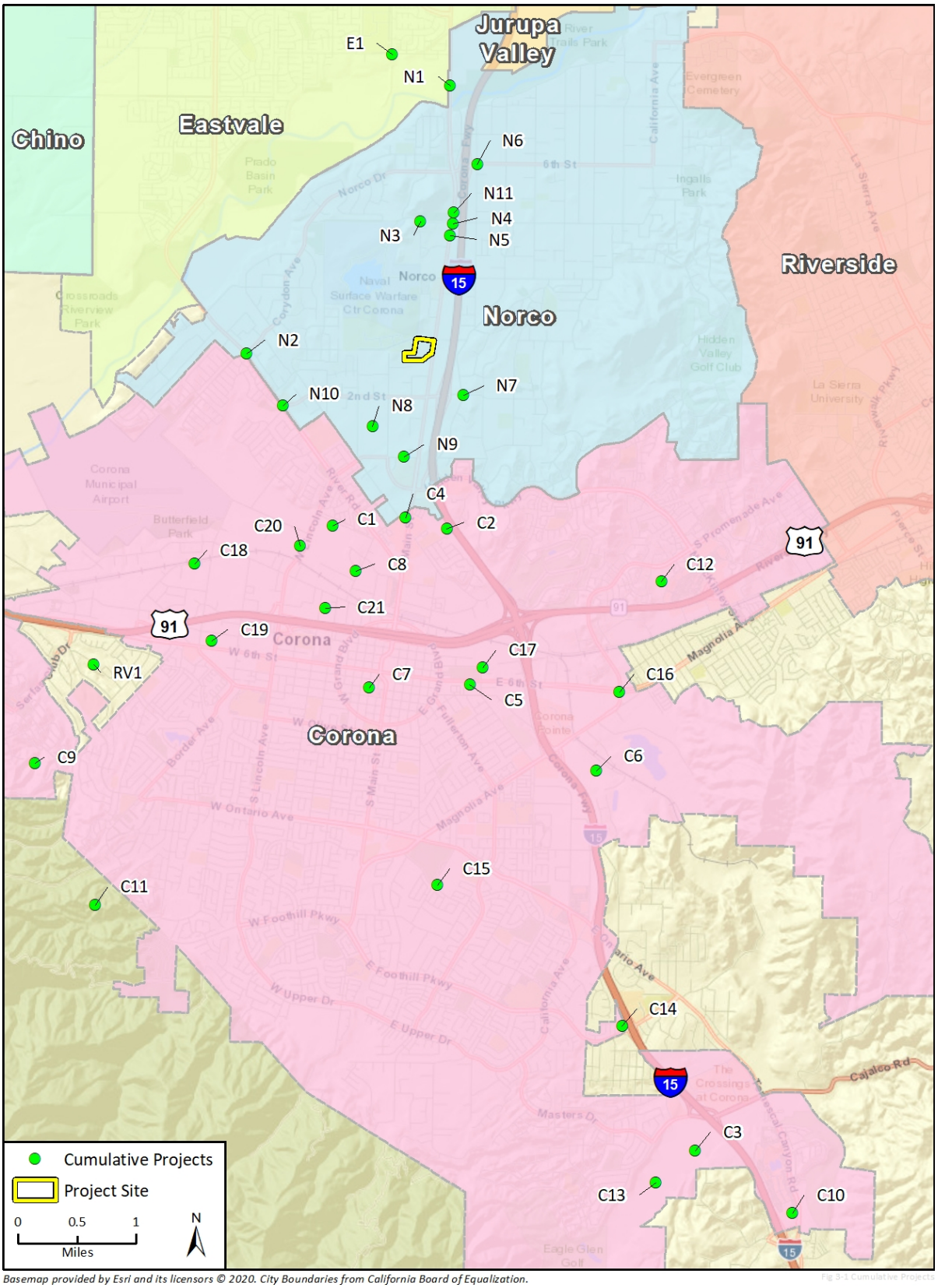
Project Number and Location		Land Use[1]	Quantity	Units[2]
N9	1919 First Street	Office	6,966	TSF
N10	1933 River Road	Convenience Market w/ Pumps	2,837	TSF
N11	3481 Hamner Avenue	Hotel	108	RM
City of Eastvale				
E1	Van Leeuwen GPA	SFDR	224	DU
City of Corona				
C1	Jeffrey Holbrook West Coast Development	Multi-Family Residential	148	DU
C2	Pecuniary Capital, LLC.	Townhomes	60	DU
C3	Nova Homes	SFDR	103	DU
C4	ASTA/Strata	Townhomes	45	DU
C5	C&C Development	Affordable Housing	86	DU
C6	Sherborn, LLC	Industrial	76	AC
C7	Corona Regional Medical Center Expansion	Medical Office	332,000	TSF
C8	Roger Egge Private realty Advisors	Industrial	95,500	TSF
C9	Sierra Bella	SFDR	237	DU
C10	Rexxco – Terrana Apartment Community	Apartments	279	DU
C11	Skyline Heights	SFDR	297	DU
C12	Vista Monterey	Apartments	442	DU
C13	Arantine Hills Master Planned Community	Commercial Residential	80,000 1,621	TSF DU
C14	Foothill Commercial Plaza	Commercial/Retail/Restaurant Hotel	82,700 120	TSF
C15	Van Daele Homes	Condos	92	RM
C16	Home Gardens Water District Well Collection Line	Well	N/A	N/A
C17	Household Hazardous Waste	Household Collection Facility	3,168	TSF
C18	1548 Maple Street	General Office	6,568	TSF
C19	LA Fitness	Health/Fitness Club	37,000	TSF
C20	Lincoln Avenue and Rincon Street Industrial	Industrial	731,000	TSF
C21	Senior Housing	Senior Housing - Attached	64	DU
County of Riverside				
RV1	Trails at Corona	SFDR Retail	426 8,500	DU TSF

[1] SFDR = Single Family Detached Residential

[2] TSF = Thousand Square Feet, DU = Dwelling Unit; VFP = Vehicle Fueling Position; AC = Acres; RM = Rooms

Source: Urban Crossroads 2020

Figure 3-1 Cumulative Projects



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4 Environmental Impact Analysis

This section discusses the possible environmental effects of the Norco Valley Square Project for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. "Significant effect" is defined by the CEQA Guidelines Section 15382 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. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per CEQA Guidelines Section 15093.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under CEQA Guidelines Section 15091.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the project in conjunction with other planned and pending developments in the area listed in Table 3-1 of Section 3, *Environmental Setting*.

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4.1 Aesthetics

This section evaluates the project's potential impacts to scenic vistas, scenic resources, visual character or quality, and light or glare. The analysis consists of a description of the visual setting for the project site and the surrounding area, a discussion of potential impacts the project would have, and any mitigation measures required to reduce impacts. The aesthetics analysis concerns public views only. Impacts to private views, such as those from residences, are not required to be analyzed under CEQA.

4.1.1 Setting

Visual quality is defined as the overall visual impression or attractiveness of an area based on the scenic resources, both natural and built. The attributes of visual quality include variety, vividness, coherence, uniqueness, harmony, and pattern. Viewshed is a term used to describe a range of resources and their context that relate to what people can see in the immediate environment in terms of foreground, middle ground, and background distances. Viewsheds refer to the visual qualities of a geographical area defined by the horizon, topography, and other natural features that give an area its visual boundary and context. Viewsheds are defined further by development that forms a prominent visual component of the area. Public views are those available from publicly accessible vantage points, such as streets, freeways, parks, and vista points. These views are available to a greater number of persons than private views, which are those available from vantage points on private property.

Sensitive viewer groups include people who reside in the area, permanently or temporarily, and those who pass through or otherwise appear in the area (e.g., commuters), who have the potential to be affected by the area's scenic features and visual quality, and by the character of scenic vistas and viewsheds.

Visual Character of the Site

The project site is in central Norco, which contains a mix of residential, commercial, and industrial development. Visually, it is a mix of relatively modern, low-rise, low-to-medium-density urban development, two-to-four lane streets with sidewalks and streetlights, and ornamental landscaping, with undeveloped hillsides in immediate or medium-distance views and mountains in long-distance views. The area is generally flat with small grade hills.

The project site is located at the southwestern corner of Third Avenue and Hamner Avenue. These two streets are lined with existing commercial, industrial, and institutional uses that primarily consist of auto repair and sales shops and other uses associated with automotive travel, food establishments, and some religious and educational institutions.

The project site is mostly vacant except for an existing RV sales lot on the northeastern portion of the site closest to the intersection. The RV sales lot is visible along the western side of Hamner Avenue for approximately 600 feet, from the intersection to the North Norco Channel. RVs for sale are the dominate visible element of the space. The RVs are also visible for approximately 200 feet along the southern side of Third Avenue from the intersection with Hamner Avenue. West of the RVs, the visible elements of the project site from Third Avenue include deciduous street trees, unpaved pedestrian pathway, low wooden fencing, and occasional fire hydrants in the foreground, a vacant lot with minimal vegetation in the middle distance, and a row of Italian cypress trees in front of a small hill.

Visual Character of the Surrounding Area

The project site has a land use and zoning designation of Specific Plan as it is located within the Norco Auto Mall Specific Plan Area, as well as the HDO zoning designation. Incremental changes to the visual character of Norco and surrounding jurisdictions have already occurred consistent with City of Norco General Plan objectives, which includes keeping a semi-rural, western-themed character exemplified by consistent visual elements such as wooden fencing along streets, drought-tolerant landscaping, western design on signage, and the occasional wagon wheel ornamentation at driveway entrances. Figure 4.1-1 maps the locations and the view directions of project site photographs and the surrounding area, included as Figure 4.1-2a through as Figure 4.1-2f.

Buildings and facilities near the project site include the following:

- The Calvary Chapel Norco, located in the northeast corner of the Third Street and Hamner Avenue intersection at 1695 Third Street, is a one-story modern adobe building with a front parking lot.
- The Norco Western Town Plaza at 2395 Hamner Avenue, located on the southeast corner of the Third Street and Hamner Avenue intersection, is a one-story strip mall with food and commercial services with front parking lot and ornamental landscaping.
- A portion of the North Norco Channel, which crosses Hamner Avenue adjacent to the southeastern corner of the project site, is a concrete-lined channel surrounded by a chain-link fence. The channel continues westward under Hamner Avenue and adjacent to the NAVI Exchange auto dealership. The channel is not visible from public vantage points except for eastern and western views from Hamner Avenue.
- John F. Kennedy Middle College High School at 1951 Third Street is located northwest of the project site, with a modern, two-story building with a front parking lot, side and back courtyards, and ornamental landscaping.
- Norco College Science, Technology, Engineering, and Math (STEM) Center at 1900 Third Street is located west of the project site. The site consists of a modern, two-story buildings with a front parking lot, side and back courtyards, and ornamental landscaping. An approximately 340-foot long landscaped garden is west of the building. A vacant, grassy area is located west of the Norco College STEM Center.
- The Norco Campus Office Park at 1801 Third Street north of the project site, is a seven-building complex of modern one-story buildings with glass and stone design elements, ornamental landscaping, and parking.
- Les Schwab Tire Center at 1701 Third Street on the northwest corner of Third Street and Hamner Avenue is a large single-story automotive repair center and tire store with a parking lot fronting Third Street.
- Single-family residences located to the south and west of the project site along Paddock Lane and Mountain Avenue are mid-Century ranch-style houses, some with small plots for domestic animals such as horses.

I-15 runs north-south through the City of Norco and is located approximately 900 feet east of Hamner Avenue and the project site. Portions of the project site where the elevation is highest are visible from I-15. Although distant mountain views to the north and south are accessible for travelers on I-15, there are no portions of I-15 that are designated or eligible for designation as a State scenic highway (Caltrans 2020).

Figure 4.1-1 Photograph Locations

Imagery provided by Microsoft Bing and its licensors © 2020.

Figure 4.1-2a Views of the Project Site and Surrounding Area

Photograph 1. The project site looking southeast from Third Street

Photograph 2. The project site looking south from Third Street

Figure 4.1-2b Views of the Project Site and Surrounding Area

Photograph 3. Northern boundary of the project site looking east along Third Street

Photograph 4. Eastern boundary of the project site looking northwest along Hamner Avenue

Figure 4.1-2c Views of the Project Site and Surrounding Area

Photograph 5. John F. Kennedy Middle College on Third Street

Photograph 6. Norco College STEM Center on Third Street

Figure 4.1-2d Views of the Project Site and Surrounding Area

Photograph 7. Norco Campus Office Park on Third Street

Photograph 8. Les Schwab Tire Center looking northeast on Third Street

Figure 4.1-2e Views of the Project Site and Surrounding Area

Photograph 9. Calvary Chapel Norco on Third Street

Photograph 10. Norco Western Town Plaza on Hamner Avenue

Figure 4.1-2f Views of the Project Site and Surrounding Area

Photograph 11. North Norco Channel looking west from Hamner Avenue

Photograph credit: Rincon Consultants, Inc. 2020.

Scenic Vistas

Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting. A scenic vista can be impacted in two ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista, or by blocking the view corridors or "vista" of the scenic resource at public locations. Important factors in determining whether a proposed project would block scenic vistas include the location of the vista, in combination with the project's proposed height, mass, and surrounding public land uses and travel corridors.

The General Plan does not specifically identify any scenic vistas. However, Beacon Hill and the Norco bluffs, along the Santa Ana River, are identified as primary landforms in the General Plan Open Space Element, Policies 2.6.1b and 2.6.1c, respectively. The project site is approximately 1.4 miles south of Beacon Hill and 1.8 miles southeast of the Santa Ana River.

The project site does not contain nor is adjacent to a scenic vista. However, long-distance views of the Santa Ana Mountains to the south of the project site and the San Gabriel Mountains to the north of the site are available from Hamner Avenue. Also, views of the Norco Hills to the east of the site and the Chino Hills to the west of the site are available along Third Street.

Light and Glare

Current light and glare sources on the project site are outdoor pole lights on the RV sales lot site. Other light sources on or near the project site include streetlights and automobile headlights on Hamner Avenue and Third Street, and outdoor lighting surrounding existing commercial, industrial, educational, and residential uses. Glare level is generally low due to the dominance of single-story buildings made of concrete and wooden materials, which is also used for signage. Nighttime glare is also limited by the medium-low levels of nighttime lighting. Overall, the level of light and glare in the surrounding area is typical of a low-density urban area with mixed uses.

4.1.2 Regulatory Setting

a. State

2020 California Green Building Standards Code (CALGreen)

CALGreen is the mandatory green building standards code for buildings in California. The California Building Standards Commission has the authority to propose CALGreen standards for nonresidential structures that include, but are not limited to, new buildings or portions of new buildings, additions and alterations, and all occupancies where no other State agency has the authority to adopt green building standards applicable to those occupancies. In 2007, California Building Standards Commission developed green building standards in an effort to meet the goals of California's landmark initiative AB 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHG) to 1990 levels by 2020.

Section 5.106.8 of CALGreen stipulates minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress. This section complies with lighting power requirements in the California Energy Code, California Code Regulations (CCR), Part 6, and design interior and exterior lighting such that zero direct-beam illumination leaves the building site. The 2018 Supplemental Update to the 2016 CALGreen included a clarified Section 5.106.8 specific to backlight, uplight, and glare, with references to new tables. Buildings must meet or exceed exterior light levels and uniformity ratios for lighting zones 1-4 as defined in Chapter 10 of the California Administrative Code, CCR, Part 1, using the strategies listed below. The project would likely be in Lighting Zone 3 (Urban areas, as defined by the 2000 U.S. Census) which allows moderately high ambient illumination:

- Shield all luminaries or provide cutoff luminaries per Section 132 (b) of the California Energy Code
- Contain interior lighting within each source
- Allow no more than .01 horizontal lumen foot-candles to escape 15 feet beyond the site boundary
- Automatically control exterior lighting dusk to dawn to turn off or lower light levels during incentive periods

The 2019 CALGreen updates, which went into effect on January 1, 2020, require nonresidential buildings to maximize LED technology in indoor and outdoor lighting.

California Scenic Highway Program

The California State legislature created the California Scenic Highway Program in 1963 to "protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment," and includes State routes identified as scenic by the California Department of Transportation (Caltrans). The "eligible" designation applies to a specific segment of the designated highway, and depends on several factors, including the breadth of the landscape visible to travelers, the scenic quality of the landscape, and the extent to which development intrudes upon a traveler's enjoyment of the view. The Legislature is responsible for making State highways eligible for designation as a scenic highway and lists them in the Streets and Highways Code Sections 260-284. For Caltrans to officially designate a highway as scenic, the local government with jurisdiction over abutting land must adopt a "scenic corridor protection program" that limits development, outdoor advertising, and earthmoving, and Caltrans must agree that it meets the criteria (Caltrans 2019).

b. Local

City of Norco General Plan

The City of Norco General Plan expresses the community's vision of its long-term physical form and development (City of Norco 2009). The following objectives and policies pertaining to aesthetics are drawn from the General Plan Land Use Element and are applicable to the project:

- **Policy 2.4.1a:** New development in the City should incorporate western-themed architectural features and building style, the level of which will be determined based on the location of a building, the type of construction, and the use of a building.
- **Policy 2.4.1c:** Street and on-site landscaping shall be provided in such a way so as to create pleasing site-related aesthetics, but also to maintain visual corridors and vista points on a neighborhood and community scale as much as possible.
- **Policy 2.4.1e:** The City shall promote the development of high quality commercial and public facilities requiring landscaping, maintenance, and permanent upkeep on all new development.
- **Policy 2.4.1g:** Commercial development proposed in areas that adjoin residential development shall provide adequate buffering by landscaping, screening, or open space. Height limits shall be established in all commercial zones so as to protect the privacy and solar access on adjacent residential lots.

City of Norco Auto Mall Specific Plan

The Norco Auto Mall Specific Plan includes policies intended for the development of automobile dealerships and associated uses to provide community serving commercial and retail uses. Although the project would not include such uses, the Norco Auto Mall Specific Plan contains applicable policies regarding aesthetics, light, and glare. The following Norco Auto Mall Specific Plan policies are applicable to the project:

- **General Requirements**
  - Building and parking lot locations shall complement the topography, shape of the lot, and the abutting land uses whenever possible.
  - Public entrances and primary showroom elevations shall be oriented toward the public streets.

  - Loading areas, storage areas, service bay and repair areas, and trash bin areas shall not be visible from any public street or pedestrian walkway.

- **Policy 40.2:** Architecture and design of street furniture, signs, and landscaping shall provide an attractive environment to motorists.
- **Policy 40.3:** Attractive park-like open spaces shall be encouraged resulting in pedestrian concourses, directed towards the various elements of the development.
- **Policy 40.5:** Aesthetically pleasing entrances to the area shall be established through the implementation of design and development standards.
- **Policy 40.7:** Design theme of buildings, landscaping and all site improvements shall be integrated to comprise a unified motif throughout the project.
- **Policy 40.10:** High standards of development shall be applied to realize the unique potential of the area, to attract desirable commercial establishments, and to provide a desirable environment for surrounding residents.
- **Policy 40.13:** To ensure that these policies and the requirements of Specific Plan One are followed, all development plans shall be approved by the City upon review of the Architectural Review Board. In addition, the Architectural Review Board will periodically review the development, operation, and maintenance within the auto mall area.

- **Site Development Regulations**
  - Building and structures may be constructed up to a height of 35 feet except buildings and structures within 200 feet of the freeway right-of-way shall not be of a height that obscures the view of the auto mall from motorists on the freeway as determined as part of the Site Plan Review.
  - Special emphasis shall be given to the harmonious composition of the roof as viewed from streets, freeways, and other adjacent buildings. Roofscapes shall be within the structure or depressed adequately within the roof structure. No equipment and ductwork shall be allowed on the roof of any structure within view from any street, freeway, or adjacent buildings.
  - All display and security lighting in the project area shall be designed for uniformity of lighting poles, fixtures, and intensity.
  - All lighting shall be designed to minimize glare to adjacent properties and streets outside the Specific Plan area.
  - The types of luminaries, mounting height, candle power, pole type, and spacing shall meet the standards within the Design Manual.
  - The pattern, form, and relationship of public and private open spaces and the design of landscaping shall be developed in harmony, integrating and complementing the permitted land uses, and the architectural design of buildings.
  - Landscaping design shall include a variety of meandering greenbelt strips and open space areas, utilizing earth mounds of variable heights where feasible with a variegated grouping pattern of trees, shrubs, and groundcover.
  - Within vehicle parking, outdoor display or storage areas, three evergreen trees of at least 24-inch box in size, shall be planted for every ten parking stalls or for each two thousand square feet of parking area excluding aisles, whichever is greater.

  - The Architectural Design Manual shall contain standards for plant material, concrete walkways, bollards and other landscape features deemed appropriate.
  - Walls and fences and other freestanding structures where permitted shall be an integral part of the overall design of the site.
  - Storage and repair areas shall be screened and secured with walls that are not less than six feet or more than eight feet in height.
  - The Design Manual shall contain standards for sign types, material, color, lettering, construction, landscaping, and mounding settings to provide a uniform appearance.
  - All outdoor trash and refuse storage shall be enclosed by a decorative block or masonry wall at least six feet in height or one foot above the highest refuse stored, and shall be located in an area that is screened from public view.
  - The Director of Community Development may require a decorative roof enclosure and decorative solid gates if the refuse area can be viewed by the general public.

- **Architectural Style:** all development in the project area shall be subject to approval by the Norco Auto Mall Architectural Review Committee. Design approval shall be based on the standards set forth in the Architectural Design Manual, which include standards for general theme, exterior walls, and roof materials specific to auto-oriented uses. The auto-oriented uses highlighted in the Norco Auto Mall Specific Plan aimed for buildings to convey an early California Spanish theme with off-white or earth tone exterior walls constructed of Spanish style textured materials, and Mission clay or Spanish style clay tile roof materials.

  A 2018 amendment to the Norco Auto Mall Specific Plan includes additional design guidelines for a specific auto-oriented project, which aims for a modernized design character that consists of simple massing and use of geometric building forms, smooth earth tone painted surfaces and exteriors with split-face block details, and flat metal roofing.

  The Norco Auto Mall Specific Plan does not contain specific design guidelines for non-auto-oriented uses. However, the general theme, exterior walls, roof materials and design shall be consistent with the overall western theme, aesthetic, visual character, and lifestyle of the City, consistent with applicable General Plan Land Use Element policies.

City of Norco Municipal Code

The following City of Norco Municipal Code sections would apply to the project:

- **15.12.080 Security Standards – Commercial/Industrial Building**

  D. Lighting and Address Markings shall conform to the following specifications:

  1. The address number of every commercial building shall be located and displayed so that it is easily visible from the street. The numerals in these numbers shall be twelve inches in height and be of a color contrasting to the background. In addition, any business which affords vehicular access to the rear through any driveway, alleyway or parking lot shall also display the same numbers on the rear of the building which shall be six inches in height.
  2. The address number of every residential dwelling shall be located and displayed so that it is easily visible from the street. The numerals in these numbers shall be 4-inches in height and be of a color contrasting to the background.

3. All exterior doors to buildings shall be equipped with a lighting device capable of providing a minimum of one foot-candle of light. All exterior bulbs shall be protected by weather and vandalism resistant covers.
4. Open parking lots, and access thereto, providing more than 10 parking spaces and for use by the general public, shall be provided with a maintained minimum of one foot-candle of light on the parking surface from dusk until the termination of business every operating day.

- **18.41.11 – Building Architecture**

  Building architecture shall reflect a desired western theme and identity. Qualities that reflect the western theme can be described as rural, informal, traditional, rustic, low profile and equestrian oriented. Conversely, qualities that are inconsistent with the western theme are urban, formal, contemporary, sophisticated, and massive. The following elements shall be considered during the architectural review process:

  Subsection 13. It is further noted and declared that a decision to substantially modify or deny plans submitted for review under this may result from plans based upon significant use of the following colors, materials, design features, and elements which are not generally illustrative and reflective of and compatible with the natural setting of the scenic and historic beauty and rural environment of the City of Norco and City's desire for a western motif; and which could have a deleterious or adverse effect on surrounding property and the peace, health, safety, and general economic welfare of the inhabitants, businesses, and industries:

  a) Bright, shiny, or non-textured metal on exterior surfaces; porcelain, plastic or similar surfaces of non-earthen hues;
  b) Bright, fluorescent type or non-earthen tone colors;
  c) Exposed mechanical equipment, including vents and exhausts;
  d) Nondescript or boxy building without façade or other recognizable characteristic or distinctive style or theme; any building design that is dominated or intended to be dominated by signs or commercial advertising;
  e) Lighting accentuating or intending to accentuate advertising or not shielded and not arranged to reflect away from adjoining properties;
  f) Paper, cloth, plastic, and metal flags or other devices electing display purposes;
  g) Extensive chain link fencing without off-setting landscaping features;
  h) Unscreened or unobscured loading docks and trash and service areas;
  i) Plastic or artificial plants or landscaping (Ord. 801, 2003)

- **15.30.020 – Hours of Construction Activity**

  Construction activity, including equipment start-up and use, and the loading, unloading and handling of materials, shall not commence before 6:30 a.m. or continue beyond 7:00 p.m., on weekdays. No construction activity for residential development projects that consist of more than one unit is permitted on Saturdays, Sundays, or national holidays unless otherwise permitted with conditions on entitlements. The restrictions from Saturdays, Sundays, and national holidays shall not apply to single-building permits for expansion and upgrade to existing buildings; however, no such construction shall begin before 8:00 a.m.

- **18.64 – Housing Development Overlay Zone**

The HDO applies to specific properties within the City. Development of HDO zoned parcels require a HDO Site Plan and are required to meet the requirements for residential development before non-residential uses, pursuant to the underlying zoning, are allowed. However, the HDO does not contain any development standards or guidelines for residential development. Section 18.64.14 states the site plan requirements, which are subject to City review.

4.1.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states the aesthetic effects of the project are considered significant if the project would:

1. Have a substantial adverse effect on a scenic vista;
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
3. 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 a publicly accessible vantage point). If the project is in an urbanized area, the project would conflict with applicable zoning and other regulations governing scenic quality;
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

b. Methodology

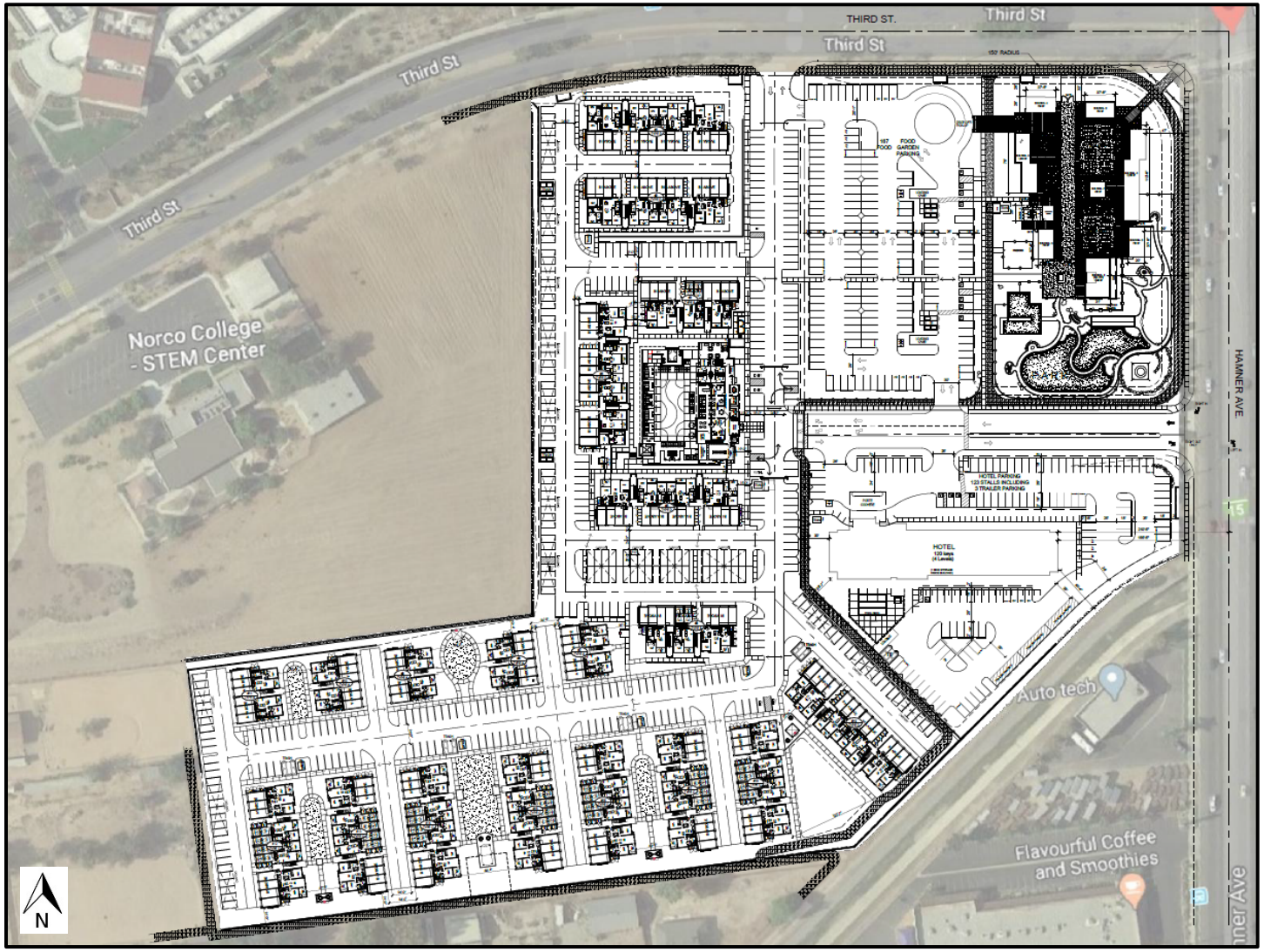
The assessment of aesthetic impacts involves an inherently subjective qualitative analysis. Reactions to particular aesthetic conditions vary according to the viewer. This evaluation compares the existing visual environment of the project site to the anticipated visual environment after implementation of the project, analyzing the nature of the anticipated change. The project site and surrounding area were viewed by examining photograph documentation from site visits. Renderings of the project design were used to consider the effects of the development on the surrounding neighborhood. Figure 4.1-3 provides the proposed site plan, Figure 4.1-4 shows a conceptual rendering of the proposed hotel, and Figure 4.1-5 shows a conceptual rendering of the proposed food garden (Appendix B).

Key Views

The following discussion identifies important, or “key,” views that could, theoretically, be noticeably altered by the project. Figure 4.1-6a and Figure 4.1-6b below contains the key views used for this analysis, the locations of which are provided in Figure 4.1-1. As recommended by the Federal Highway Administration (FHWA), these views are described according to view character and quality, the visual resources present, viewer group and viewer group sensitivity, as well as the duration of the views (1981). The terminology is described below:

- The character of a view is described by the topography, land uses, scale, form, and natural resources depicted in the view. The assessment of the visual character is descriptive and not evaluative because it is based on defined attributes.
- Visual quality refers to the aesthetics of the view. Determining the quality of a view can be subjective because it is based in part on the viewer’s values and notions about what constitutes

Figure 4.1-3 Proposed Site Plan



Note: Above figure is not to scale. Please refer to project site plans, included in Appendix B.
Source: Architects Orange 2020.

Figure 4.1-4 Hotel Conceptual Design

Source: Architects Orange 2020.

Figure 4.1-5 Food Garden Conceptual Design

Source: Architects Orange 2020.

Figure 4.1-6a Key Views

Viewpoint 1. Looking east from Third Street approximately 800 feet west of Hamner Avenue.

Viewpoint 2. Looking west from Third Street at Hamner Avenue.

Figure 4.1-6b Key Views

Viewpoint 3. Looking south on Hamner Avenue near the northern boundary of the project site.

Viewpoint 4. Looking northeast from Hamner Avenue near southern boundary of the project site.

Photograph credit: Rincon Consultants, Inc. 2020.

a quality setting. In an effort to establish an objective framework, this assessment applies the evaluative criteria (i.e., vividness, intactness, and unity) and qualitative rankings (low, medium, and high) presented in the FHWA guidelines. Vividness is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns. Intactness is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. Unity is the visual coherence and compositional harmony of the landscape considered as a whole.

- Viewer response to a proposed project is predicted according to the land use and/or activities of the viewers, the relative number of viewers, and the amount of exposure to the view. Viewer groups/sensitivity refers to those who would see the project both during construction and after its completion and whether they would be likely to have a low, moderate, or high level of concern about aesthetic changes resulting from the project. It is presumed that residents who can see the project from their place of residence would have a relatively high level of sensitivity; however, CEQA does not consider impacts to private views.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project have a substantial adverse effect on a scenic vista?

Impact AES-1 THE PROJECT WOULD NOT SUBSTANTIALLY DEGRADE THE PUBLIC VIEW OF THE CHINO HILLS, SAN GABRIEL MOUNTAINS, BEACON HILL, OR NORCO BLUFFS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Scenic vistas comprise viewpoints that offer expansive/panoramic views for the benefit of the public. They can be associated with a dramatic change in elevation, but scenic vistas can also be available from an undeveloped, flat area looking toward features in the distance, such as mountains.

The project site is not located in any scenic area identified in the City of Norco General Plan. As previously described, scenic vistas of the San Gabriel Mountains to the north, Santa Ana Mountains to the south, and Norco Hills to the east and the Chino Hills to the west are intermittently accessible from public vantage points adjacent to the project site, such as Hamner Avenue and Third Street, as seen in Viewpoints 1-4 in Figure 4.1-6a and Figure 4.1-6b. Beacon Hill and the Norco Bluffs are identified as primary landforms in the General Plan. The Norco Bluffs and Beacon Hill are not visible from the project site or vicinity.

The project would demolish the existing RV sales lot located in the northeast corner of the site and develop the site with 320 multi-family residential units, food garden and entertainment center with eight single- and double-story buildings and outdoor amenities, and a four-story hotel. The proposed hotel development would be located in the southeastern portion of the project site, and total up to 70,000 sf within a four-story building with 120 rooms and would be the largest single building constructed on the site. As shown in Figure 4.1-3, the hotel would be set back from Hamner Avenue, with the bulk of the massing perpendicular to the street. The residential complexes would be located on the interior of the project site, with minimal street frontage on Third Street. The project components with the most street frontage would be the food garden, park space/landscaping, and surface parking. The buildings in the food garden would be set back from Third Street and Hamner Avenue to comply with General Plan Land Use Element Policy 2.4.1c:

Street and on-site landscaping shall be provided in such a way so as to create pleasing site-related aesthetics, but also to maintain visual corridors and vista points on a neighborhood and community scale as much as possible.

The project would not substantially diminish accessible views of the scenic vistas of the San Gabriel Mountains or Santa Ana Mountains from public vantage points for motorists or pedestrians along Hamner Avenue. Westward views of the Chino Hills and eastward views of Norco Hills are currently intermittent along Third Street adjacent to the project site, and the project would not substantially diminish those long-distance views. Although the project would change public views experienced by motorists and pedestrians of the project site, the project would not encroach into existing public views of an identified scenic vista or long-distance views of the mountains. The proposed setbacks and maximum building heights would maintain the existing public views of the mountains. Overall, the height, scale, and design of the project would not hinder long-distance views of the mountains and hills and would not result in visual degradation of the mountain vistas.

The overall quality of views of scenic vistas from publicly accessible vantage points would not substantially change. Therefore, project impacts related to scenic vistas would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Impact AES-2 THE PROJECT WOULD NOT SUBSTANTIALLY DAMAGE SCENIC RESOURCES WITHIN THE VIEWSHED OF A DESIGNATED OR ELIGIBLE STATE SCENIC HIGHWAY AS DEFINED BY CALTRANS AND THE CALIFORNIA SCENIC HIGHWAY PROGRAM. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

A State scenic highway is designated as scenic depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view (Caltrans 2019). As stated above, I-15 is located approximately 900 feet east of Hamner Avenue and the project site. There are no portions of I-15 that are designated or eligible for designation as a State scenic highway (Caltrans 2020). No officially designated or eligible State scenic highways or officially designated county scenic highways exist within one mile of the project area. Therefore, the project would have no impact to scenic resources within a State scenic highway.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

There would be no impact without mitigation.

Threshold 3:	Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?

Impact AES-3 THE PROJECT WOULD ALTER THE EXISTING CHARACTER OF THE SITE FROM THAT OF AN RV SALES LOT AND VACANT LOT TO A MULTI-FAMILY RESIDENTIAL COMPLEX, FOOD GARDEN, AND HOTEL. THE PROJECT WOULD CONFORM TO THE CITY'S VISION AS DEFINED BY POLICIES DESIGNED TO ENHANCE THE VISUAL QUALITY OF NEW DEVELOPMENT. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

A majority of the project site is vacant with a RV sales lot, as shown in Photographs 1-4 in Figure 4.1-2a and Figure 4.1-2b. Most of the components of the project within public view would be the food garden and hotel buildings, which would have a western town theme and aesthetic. Building finishes for the proposed food garden structures would consist of stucco, siding, metal panels, glass, and reclaimed wood; with metal roofs and/or asphalt shingles. Building accents would consist of painted exposed steel structures, wood posts and trellis, and composite wood. Proposed hotel building finishes would primarily consist of stucco, siding, metal panels, and glass, with a metal or asphalt shingle roof and composite wood accents.

Landscaping throughout the project site would consist of a variety of California native and non-native plants, and low water use trees, shrubs, and ground cover; these are detailed in the plans located in Appendix B. Large trees are proposed along the perimeter of the site as well as along the on-site circulation pathway west of the proposed residential component. Trees of varying sizes are proposed within parking lot planters and throughout the common open space areas for the residential and commercial components. Trees included in the proposed landscape plan consist of Chitalpa, magnolia, California sycamore, and Mexican elderberry. Groundcover, shrubs, and accent plans are proposed along walkways, throughout the residential common open space areas, and in the commercial gathering areas, seating areas, and courtyards. The plans include decorative crosswalks, paving, and seating furniture for the residential and commercial areas. Generally, parking lots, vehicles, loading areas, and service areas for the project would be orientated away from public views to ensure that these areas would not be dominant visual elements.

Changes to Key Views

Views from the backyards of private residences along Paddock Lane and Mountain Avenue may be impacted, but CEQA does not consider private views to be public vantage points. There are no parks or other public gathering spaces that would have impacted views from the project. Public views most typical of the project site are from vehicular, pedestrian, bicycle, or other means of travel on Third Street and Hamner Avenue. Viewpoints shown in Figure 4.1-6a and in Figure 4.1-6b are representative of these views.

Viewpoints 1 and 2, depicting views while traveling east and west on Third Street, are generally medium-quality views as they contain some natural and/or cohesive elements in the foreground and some scenic views in the background, particularly in Viewpoint 2. The project would alter the foreground views of the project site in the viewpoints, primarily changing the vacant lot to the food garden, park space, and landscaping. However, the design elements included in the project, particularly the western theme and ornamental landscaping, would increase the visual quality of the views since they would provide a cohesive aesthetic that emphasizes Norco's visual identity.

Although not entirely seen in Viewpoints 1 and 2, the buildings adjacent to Third Street, such as the Norco College STEM Center and Norco Campus Office Park (Photographs 6 and 7 in Figure 4.1-2c, and in Figure 4.1-2d, respectively), are built with a soft-color, modern aesthetic that blends in with surrounding natural elements. The Les Schwab Tire Center (Photograph 8 in Figure 4.1-2d) is also modern with bolder features. All three buildings are under three stories and contain perimeter trees and landscaping along the street frontage. Therefore, the project would be visually compatible with existing structures on Third Street based on proposed building scale, design, and finishing materials.

Viewpoints 3 and 4, depicting views while traveling north and south on Hamner Avenue, are generally low-quality views, as there are distant scenic mountain views, but foreground views are generally inconsistent and uninteresting, particularly the RV sales lot on the project site as it lacks ornamental landscaping. Aside from the red-tiled building roofs and row of street trees, there is little visual consistency on the eastern side of Hamner Avenue. The project would provide street frontage and strengthen the visual identity on the southwest corner of the intersection of Third Street and Hamner Avenue and improve overall visual quality with the development of ornamental landscaping, street trees, and cohesive façade.

Compatibility with Local Requirements

The project would be consistent with General Plan Land Use Element Policy 2.4.1a and Norco Municipal Code Section 18.41.11, which require new development to incorporate western-themed architectural features and building style. The project would also be consistent with General Plan Land Use Element Policy 2.4.1e, which encourages the development of high quality commercial and public facilities requiring landscaping, maintenance, and permanent upkeep on all new development. The project would also comply with the requirements set forth in Norco Municipal Code Sections 18.41.11 and 15.12.080.

The project would be consistent with the Norco Auto Mall Specific Plan policies regarding earth-tone and exposed wooden beam facades; the creation of a unified design theme for buildings, landscaping and all site improvements; the inclusion of attractive park-like open spaces with pedestrian concourses, and aesthetically pleasing entrances. The proposed buildings would incorporate western-themed architectural features, which would be inconsistent with the early California Spanish architectural style specified in the Norco Auto Mall Specific Plan. However, the Norco Auto Mall Specific Plan was intended for automobile dealerships and associated uses; not residential or mixed-use development. The HDO does not contain any development standards or guidelines for residential development, but does provide site plan requirements, which are subject to City review. As such, the proposed site plan and designs will be reviewed by the City to ensure proposed development is consistent with applicable development standards and provisions of the General Plan.

The Norco Auto Mall Specific Plan's maximum height allowance is 35 feet; however, a conditional use permit application may allow for a height increase up to 50 feet. The project would develop residential buildings with a maximum height of 45 feet, food garden buildings with a maximum height of 35 feet, and a hotel with a maximum height of 60 feet. The City's Architectural Review Subcommittee would review the height of the proposed hotel, and development standards for the project would be specified in the Standard Conditions of Approval. As previously stated, the proposed site plan and designs would be reviewed by the City pursuant to the HDO zoning regulations. An analysis of the project's compatibility with applicable zoning requirements is discussed in Section 4.10, *Land Use and Planning.*

The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings and would not conflict with regulations governing scenic quality. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 4:	Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Impact AES-4 THE PROJECT WOULD INTRODUCE NEW SOURCES OF LIGHT AND GLARE TO THE PROJECT SITE TYPICAL OF RESIDENTIAL, COMMERCIAL/FOOD ESTABLISHMENT, AND HOTEL USES. ADHERENCE TO STATE AND LOCAL STANDARDS AND REGULATIONS REGARDING INTERIOR AND EXTERIOR LIGHTING, SITE DESIGN, AND CONSTRUCTION PERMITTING WOULD ENSURE PROJECT IMPACTS ARE LESS THAN SIGNIFICANT.

Under current conditions, light and glare from existing development is moderate on the portion of the project site that is used as an RV sales lot. The remainder of the project site has minimal light from streetlights along Third Street. However, the project site is in an urbanized area with existing uses that contribute to light and glare, such as vehicles traveling on Third Street and Hamner Avenue, streetlights, and exterior lighting from residential, commercial, and institutional structures.

Construction

Construction of the project would be restricted to the City's permitted construction hours, which prohibits activities between 7:00 p.m. and 6:30 a.m., Saturdays, Sundays, or legal holidays. This would limit the need for auxiliary lighting that would illuminate construction activities, as those would occur during the day. Therefore, no adverse light or glare impacts to adjacent properties would result from temporary construction activities.

Operation

Implementation of the project would create new light sources from interior and exterior illumination associated with the residential, hotel, and food garden buildings and security lighting in parking areas, as well as headlights of cars entering and leaving the site during non-daylight hours and from increased traffic along Third Street and Hamner Avenue.

The project would be consistent with the City of Norco's Municipal Code and General Plan requirements, which require that on-site areas be illuminated for purposes of safety, security, and nighttime wayfinding including lighting for parking areas, pedestrian walkways, signage, architectural and landscape features, and loading dock areas. Although the amount of nighttime lighting from the project site would increase compared to the existing RV sales lot and vacant space, the project would be subject to the lighting requirements of the 2019 CALGreen updates which require exterior lighting to be arranged to reflect away from adjoining properties; the City's Municipal Code Section 15.12.080, which provides lighting standards; and Municipal Code

Section 18.41.11 that requires exterior lights be shielded and arranged to reflect away from adjacent properties.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare from reflective surfaces occurs as a result of the addition of large expanses of glass, metal, and other reflective surfaces for building façades with new construction. The project would develop new buildings in the food garden that would generally be constructed with stucco, siding, metal panels, glass, and reclaimed wood; with metal roofs and/or asphalt shingles. Building accents would consist of painted exposed steel structures, wood posts and trellis, and composite wood. Proposed hotel building finishes would primarily consist of stucco, siding, metal panels, and glass, with a metal or asphalt shingle roof and composite wood accents. The project would not construct buildings with large expanses of glass or unpainted metal finishings that would result in large amounts of glare, in compliance with Norco Municipal Code Section 18.41.11, which does not allow bright, shiny, or non-textured metal on exterior surfaces. Compliance with the CALGreen code and the City's Municipal Code would be verified during the plan check and the development permitting process.

Car windows could potentially produce glare when cars enter or exit the project site under operational conditions, particularly on bright, sunny days. The tree canopy predicted by the proposed landscape plan would mitigate this glare, to the extent possible, from cars entering and exiting the site. Tree plantings would also moderate potential glare from cars parked on the site, and vehicle ingress/egress lanes would be situated in a way that would limit nighttime light impacts from vehicle headlights on the proposed residences. Proposed six-foot high fencing with dense landscaping would be placed along the western property line between the project site and existing residences and the Norco College STEM Center, which would provide privacy between the proposed multi-family units and the existing single-family residences to the west. A solid six-foot high precast concrete wall, accented to look like wood textured finish, would be placed along the southern boundary of the project site to ensure privacy between the proposed multi-family units and the existing single-family residences to the south; a small portion of the southern boundary fence located near Hamner Avenue would consist of six-foot high tubular steel fencing for security and site visibility near the street and from the hotel parking lot. These proposed fences along the western and southern project site boundaries would reduce light and glare impacts from the project on existing residences on Mountain Avenue and Paddock Lane.

The project site is outside the boundary area regulated by the Riverside County Lighting Ordinance No. 655, which directs lighting methods for development to reduce light and glare within 45 miles of the Mt. Palomar Observatory.

With adherence to State and local requirements limiting light trespass and use of reflective materials, development of the project would have a less than significant impact with respect to new sources of substantial light or glare that would adversely affect daytime or nighttime views in the area.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.1.4 Cumulative Impacts

Currently planned and pending projects in Norco and surrounding areas, including the City of Eastvale and the City of Corona, are listed in Table 3-1 in Section 3, *Environmental Setting.*

As evidenced in the City of Norco General Plan and Norco Auto Mall Specific Plan provisions, the City has long anticipated that the project site would be redeveloped for new urban uses. The cumulative change in visual condition that would result from the project, in combination with future nearby projects would not be considered adverse, because the project would implement the City of Norco General Plan, Municipal Code, and Norco Auto Mall Specific Plan regulations related to architecture, landscaping, signs, lighting, and other related items that are intended to improve visual quality.

All new development in Norco and surrounding jurisdictions would be subject to CALGreen requirements and policies contained in their respective cities' General Plan and Municipal Code standards for architecture, site design, building materials, color palette, landscaping, lighting, loading docks, storage areas, utilities, rooftop equipment, construction hours, and other features that may impact aesthetics. Adherence to these policies on an individual project-level basis would reduce the cumulative impacts associated with light spillage and glare and maintain visual consistency and quality with surrounding development.

Development on the project site and northern portion of Norco would not adversely impact scenic resources or nighttime views. Publicly accessible distant views of the San Gabriel Mountains, Santa Ana Mountains, or Chino Hills State Park from major roadways would not substantially be impacted by the project and would contribute to cumulative impacts on publicly accessible views of scenic vistas. The project site and surrounding area are not located near State-designated scenic highways, or highways eligible for designation as a scenic highway, and are outside the boundary of the impact area for the Mt. Palomar Observatory. Therefore, cumulative impacts to aesthetics, light, and glare would be less than significant.

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4.2 Air Quality

This section analyzes the project's potential impacts on air quality. The analysis contains a description of the air quality setting for the project site and the surrounding area, the regulatory setting for air quality emissions and management, and a discussion of potential temporary impacts relating to construction activity and potential long-term impacts associated with project operation.

The analysis is based on the Air Quality and Greenhouse Gas Emissions Study prepared by Rincon Consultants, Inc. (2020) which is included as Appendix C, and the Traffic Impact Analysis (TIA) prepared by Urban Crossroads (2020) which is included as Appendix L. The Air Quality and Greenhouse Gas Emissions Study is based on information compiled from the project applicant based on proposed project components and features, and modeling results from the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. (The contents and methodology of the TIA are further discussed in Section 4.13, *Transportation*.)

4.2.1 Setting

a. Air Quality Setting

Local Climate and Meteorology

The project site is in the South Coast Air Basin (the Basin), which is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east; and the Riverside County/San Diego County border to the south. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as the San Gorgonio Pass in Riverside County. The regional climate in the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. Air quality in the Basin is influenced primarily by meteorology and a wide range of emissions sources, such as dense population centers, substantial vehicular traffic, and industry.

Air pollutant emissions in the Basin are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are distributed widely and include sources such as painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles and other modes of transportation, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Standards

The U.S. Environmental Protection Agency (USEPA) has set primary national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), Particulate Matter (PM_{10}, $PM_{2.5}$), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition,

California has established health-based ambient air quality standards (CAAQS) for these and other pollutants, some of which are more stringent than federal standards. Table 4.2-1 lists the current federal and State standards for regulated pollutants.

Table 4.2-1 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS	CAAQS
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur dioxide	Annual	–	–
	24-Hour	–	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	–	20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3
$PM_{2.5}$	Annual	12 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	–
Lead	30-Day Average	–	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	–

ppm = parts per million; NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards
µg/m^3 = micrograms per cubic meter
Source: California Air Resources Board (CARB) 2016

Air Pollutants of Primary Concern

The federal and State clean air acts mandate the control and reduction of certain air pollutants. Under these laws, USEPA and CARB have established ambient air quality standards for certain "criteria" pollutants. Ambient air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions, and by the climate and topographic influences discussed above. Proximity to major sources is the primary determinant of concentrations of non-reactive pollutants, such as CO and suspended particulate matter. Ambient CO levels usually follow the spatial and temporal distributions of vehicular traffic closely. A discussion of each primary criterion pollutant is provided below.

Ozone

Ozone (O_3) is produced by a photochemical reaction (i.e., triggered by sunlight) between nitrogen oxides (NO_X) and reactive organic gases (ROG).[1] NO_X is formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because O_3 requires sunlight to form, it mostly occurs in substantial concentrations between the months of April and October. O_3 is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to O_3 include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

CO is an odorless, colorless gas and causes a number of health problems including fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels in on-road vehicles and at power plants is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the State CO standards are associated generally with major roadway intersections during peak-hour traffic conditions.

Localized CO "hotspots" can occur at intersections with heavy peak-hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high that the local CO concentration exceeds the NAAQS of 35.0 ppm or the CAAQS of 20.0 ppm. However, all areas of the Basin have remained below federal and State CO standards since 2003 (South Coast Air Quality Management District [SCAQMD] 2016).

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. Nitric oxide is the principal form of nitrogen oxide produced by combustion, but nitric oxide reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. Nitrogen dioxide is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis may occur in young children at concentrations below 0.3 ppm. Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

Suspended Particulate Matter

Suspended particulate matter (PM_{10}) is particulate matter measuring no more than 10 microns in diameter; $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates, and sulfates. Both PM_{10} and $PM_{2.5}$ are by-products of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects

[1] Organic compound precursors of ozone are routinely described by variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms. Those important from an air quality perspective include: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), ROG (reactive organic gases), ROC (reactive organic compounds), and VOC (volatile organic compounds). SCAQMD uses the term VOC to denote organic precursors.

associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates (those 2.5 microns and below) can be very different. The small particulates generally come from windblown dust and dust kicked up by mobile sources. The fine particulates are generally associated with combustion processes, and form in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an adsorbed toxic substance.

Toxic Air Contaminants

The California Health and Safety Code defines a toxic air contaminant (TAC) as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines. According to CARB, diesel engine emissions are believed to be responsible for about 70 percent of California's estimated known cancer risk attributable to TACs and they make up about 8 percent of outdoor $PM_{2.5}$ (CARB 2019c).

Lead

Lead (Pb) is a metal found in the environment and in manufacturing products. The major sources of Pb emissions historically have been mobile and industrial sources. In the early 1970s, the USEPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The USEPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the USEPA's regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least in part as a result of national emissions standards for hazardous air pollutants (USEPA 2014). Because of phasing out leaded gasoline, metal processing is now the primary source of lead emissions. The highest level of lead in the air is found generally near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers.

b. Current Air Quality

The SCAQMD operates a network of air quality monitoring stations throughout the Basin. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The monitoring station closest to the project site is the Norco-Norconian located at USNFACNNorco approximately 0.6-mile northwest of the project site. The Norco-Norconian station only reported PM_{10} concentrations. Therefore, all other criteria pollutant concentrations were obtained from the nearest station reporting federal and State data, Mira Loma Van Buren monitoring station, located at 5130 Poinsettia Place, approximately 6.6 miles northeast of the project site. Table 4.2-2 indicates the number of days that each of the federal and State standards has been exceeded at monitoring station near the project site in each of the last three years for which data is available. In the vicinity of the project site, the federal and State 8-hour ozone standards were exceeded each year from

2016 to 2018, and the State worst hour ozone standard was exceeded each year from 2016 to 2018.[2] In addition, the PM_{10} and $PM_{2.5}$ federal and State standards were exceeded each year. No other federal or State standards were exceeded at nearby monitoring stations.

Table 4.2-2 Ambient Air Quality

Pollutant	2016	2017	2018
Ozone (ppm), maximum concentration 8-hours[1]	0.106	0.111	0.107
Number of days of federal exceedances (>0.070 ppm)[2]	65	64	57
Number of days of State exceedances (>0.070 ppm)[2]	43	48	32
Ozone (ppm), maximum concentration 1-hour	0.140	0.144	0.129
Number of days of State exceedances (>0.09 ppm)	34	41	21
Nitrogen Dioxide (ppm), maximum concentration 1-hour	0.065	0.065	0.055
Number of days of federal exceedances (>0.100 ppm)	0	0	0
Number of days of State exceedances (>0.18 ppm)	0	0	0
Particulate Matter <10 microns ($\mu g/m^3$), maximum concentration 24-hours[3]	62.4	85.1	100.9
Number of days of federal exceedances (>150 μg/m3)	0	0	0
Number of days of State exceedances (>50 μg/m3)	7	8	3
Particulate Matter <2.5 microns ($\mu g/m^3$), maximum concentration 24-hours	50.9	63.9	89.1
Estimated number of days of federal exceedances (>35 $\mu g/m^3$)	7	10	6

[1] Data for pollutants (with the exemption of particulate matter < 10 microns) was obtained from the Mira Loma Van Buren Station reporting both federal and State data. The Mira Loma Van Buren is located at 5130 Poinsettia Place, approximately 6.6 miles northeast of the project site

[2] Federal and State exceedances differ due to different data collection and analysis methodologies.

[3] Particulate Matter < 10 microns data was obtained from the Norco-Norconian, the nearest monitoring station reporting both federal and State Particulate Matter < 10 microns data. The Norco-Norconian is located at USNFACNNorco, approximately 0.62 miles northwest of the project site.

Source: CARB 2019a

c. Sensitive Receptors

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

[2] Most recent data provided by iADAM. [online]: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed March 2020.

The closest sensitive receptors include single-family residences located approximately 45 feet to the south and southeast boundary of the project site and one pre-school (Norco Headstart Preschool, 1900 Third Street) located approximately 145 feet northwest of the project site boundary.

4.2.2 Regulatory Setting

a. Federal

As discussed in more detail below, federal and State governments have been empowered by the federal and State clean air acts to regulate the emission of airborne pollutants and have established ambient air quality standards for the protection of public health. The USEPA is the federal agency designated to administer air quality regulation, and CARB is the State equivalent under the California Environmental Protection Agency (CalEPA). County-level air pollution control districts and air quality management districts provide local management of air quality. CARB establishes air quality standards and is responsible for control of mobile emission sources; the local air pollution control districts are responsible for enforcing standards and regulating stationary sources. CARB has established 14 air basins statewide.

Federal Clean Air Act

The USEPA is charged with implementing national air quality programs. USEPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), passed in 1963 by the U.S. Congress and amended several times. The 1970 federal CAA amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including non-attainment requirements for areas not meeting NAAQS and the Prevention of Significant Deterioration program. The 1990 federal CAA amendments represent the latest in a series of federal efforts to regulate air quality in the United States. The federal CAA allows states to adopt more stringent standards or to include additional pollution species.

National Ambient Air Quality Standards

The federal CAA requires USEPA to establish primary and secondary NAAQS for a number of criteria air pollutants. The air pollutants for which standards have been established are considered the most prevalent air pollutants known to be hazardous to human health. NAAQS have been established for ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and Pb.

b. State

California Clean Air Act

The California CAA, signed into law in 1988, requires all areas of the State to achieve and maintain the CAAQS by the earliest practical date. CARB is the State air pollution control agency and is a part of CalEPA. CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California, and for implementing the requirements of the California CAA. CARB overseas local district compliance with federal and California laws, approves local air quality plans, submits the State implementation plans to the USEPA, monitors air quality, determines and updates area designations and maps, and sets emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Ambient Air Quality Standards

The California CAA requires CARB to establish CAAQS. Similar to the NAAQS, CAAQS have been established for ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, Pb, vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. In most cases, the CAAQS are more stringent than the NAAQS. The California CAA requires all local air districts to endeavor to achieve and maintain the CAAQS by the earliest practical date. The California CAA specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources.

Assembly Bill 1493

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (Pavley), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of greenhouse gas (GHG) emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG standards for motor vehicles beginning with the 2009 model year. Pavley I took effect for model years starting in 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" will cover 2017 to 2025. Fleet average emission standards would reach 22 percent reduction from 2009 levels by 2012 and 30 percent by 2016. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles, and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels.

c. Local

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a regional planning agency that serves as a forum for regional issues relating to transportation, economics, community development, and environmental issues. SCAG is not an air quality management agency, but it is responsible for development of transportation, land use, and energy conservation measures that impact air quality. SCAG's Regional Comprehensive Plan and Guide provide growth forecasts used by SCAQMD to develop air quality and land use strategies (SCAG 2008). SCAG is charged with developing and implementing Senate Bill 375, a measure that addresses GHG reduction in the State, with participation from Norco and the other cities and counties that make up SCAG.

South Coast Air Quality Management District Air Quality Management Plan

The SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The District's Air Quality Management Plan (AQMP) is updated every three years, and each update has a 20-year horizon. The 2016 AQMP was adopted on March 3, 2017 and incorporated new scientific data and notable regulatory actions that have come about since adoption of the 2012 AQMP, including the approval of the new federal 8-hour ozone standard of 0.070 ppm that was finalized in 2015 (SCAQMD 2017). SCAG's projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) are integrated into the 2016 AQMP.

The 2016 AQMP addresses several federal and State planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and updated meteorological air quality models (SCAQMD 2017). The 2017 AQMP builds upon the approaches taken in the 2012 AQMP for the attainment of federal particulate matter and ozone standards and highlights the significant reductions to be achieved. It emphasizes the need for interagency planning to identify strategies to achieve reductions within the timeframes allowed under the federal CAA, especially in the area of mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. The AQMP includes attainment demonstrations of the new federal 8-hour ozone standard and vehicle miles travelled emissions offsets, according to recent USEPA requirements.

City of Norco General Plan

The City of Norco General Plan Conservation Element contains goals and policies for Norco's vision for air quality, GHG reduction, and conservation (City of Norco 2014). General Plan Conservation Element Chapter 2.5 identifies regional sources of pollution, geographic considerations affecting air quality in Norco, and various goals and policies intended to address air quality issues in the City. The following policies in the General Plan Conservation Element are relevant to the project:

- **Policy 2.9.2:** Implement the applicable local strategies as feasible from the RTP/SCS 2012-2035.
- **Policy 2.9.11:** Encourage shared parking and pedestrian access between adjacent similar land uses to encourage walking while at the same time discouraging short vehicle trips between close destinations.
- **Policy 2.9.12:** Encourage a mix of land uses around high-density projects to encourage walking for convenience items as opposed to vehicle trips.

4.2.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states the air quality impacts of the project would be significant if the project would:

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

Regional Significance Thresholds

SCAQMD recommends the quantitative regional significance thresholds for temporary construction activities and long-term project operation in the Basin listed in Table 4.2-3 (SCAQMD 2015).

Table 4.2-3 SCAQMD Regional Air Quality Significance Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of ROG	55 pounds per day of ROG
100 pounds per day of NO_X	55 pounds per day of NO_X
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO_X	150 pounds per day of SO_X
150 pounds per day of PM_{10}	150 pounds per day of PM_{10}
55 pounds per day of $PM_{2.5}$	55 pounds per day of $PM_{2.5}$

Source: SCAQMD 2015

Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook* (1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_X, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions in construction areas up to five acres in size. However, LSTs only apply to emissions in a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008). As such, LSTs are typically applied only to construction emissions because the majority of operational emissions are associated with project-generated vehicle trips.

The SCAQMD provides LST lookup tables for project sites that measure one, two, or five acres. If a site is greater than five acres, SCAQMD recommends a dispersion analysis be performed. The project involves an approximately 19.1-acre disturbance area. It is unlikely that more than five acres would be under active construction at one time; therefore, this analysis utilizes the five-acre LSTs. This analysis uses a regression calculator to determine an applicable LST based on the project site area and the LST lookup values for two- and five-acre construction sites. LSTs are provided for receptors at a distance of 82 to 1,640 feet from the project disturbance boundary to the sensitive receptors. Construction activity would occur approximately 45 feet south and southeast border of the closest sensitive receptors, an existing single-family residence, and Norco Headstart school approximately 145 feet northwest. According to the SCAQMD's publication, *Final LST Methodology*, projects with boundaries located closer than 82 feet to the nearest receptor should use the LSTs for receptors located at 82 feet. Therefore, the analysis below uses the LST values for 82 feet. In addition, the project is located in SRA-22 (Norco/Corona). LSTs for construction in SRA-22 on a five-acre site with a receptor 82 feet away are shown in Table 4.2-4.

Table 4.2-4 SCAQMD LSTs for Construction (SRA-22)

Pollutant	Allowable Emissions for a Five-acre Site in SRA-22 for a Receptor 82 Feet Away (lbs/day)
Gradual conversion of NOX to NO2	270
CO	1,700
PM_{10}	12
$PM_{2.5}$	8
Source: SCAQMD 2009	

b. Methodology

Criteria pollutant emissions for project construction and operation were calculated using CalEEMod, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The model calculates criteria pollutant emissions of CO, PM_{10}, $PM_{2.5}$, SO_2, the ozone precursors, ROG, and NO_X. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (CAPCOA 2017). The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in Appendix C.

Construction Emissions

Project construction would primarily generate temporary criteria pollutants from construction equipment operation on site, construction worker vehicle trips to and from the site, and from export of materials off-site. Construction input data for CalEEMod include but are not limited to: (1) the anticipated start and finish dates of construction activity; (2) areas to be excavated and graded; and (3) volumes of materials to be exported from and imported to the project site. The analysis assessed maximum daily emissions from individual construction activities, including site preparation, grading, building construction, and architectural coating. Construction would require heavy equipment during site preparation, grading, and building construction. Construction phase timing and equipment estimates are based on surveys of construction projects in California conducted by members of CAPCOA. Project construction is planned over approximately to commence in July 2021 and complete in December 2024, taking approximately 42 months. The project would occur in three phases:

- **Phase I:** Includes site preparation and grading for the entire project site, as well as installation of wet and dry utilities and asphalt paving for apartments and food garden. Phase I would take nine months total.
- **Phase II:** Includes building construction and architectural coating for apartment and food garden parcels of the project site. Phase II would occur for 24 months total and may overlap with Phase I.

- **Phase III:** Includes building construction, architectural coating, installation of wet and dry utilities, and asphalt paving for hotel parcel of project site. Phase III would occur for approximately 30 months and may overlap with Phase II for up to 24 months.

The quantity, duration, and the intensity of construction activity influences the amount of construction emissions and their related pollutant concentrations that occur at any one time. The emission forecasts modeled for this report reflect conservative assumptions where a relatively large amount of construction is occurring in a relatively intensive manner. Overlapping of construction phases was also assumed for this analysis as a conservative approach. If construction is delayed or occurs over a longer period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval). Worker and vendor trip generation rates were adjusted to account for each phase of construction.

CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. Emissions calculations assume application of water during grading in compliance with SCAQMD Rule 403, Fugitive Dust, and Rule 1113, Architectural Coatings (stated below). Site watering would be implemented three times a day during project construction as part of dust control.

Pursuant to SCAQMD Guidance, total construction GHG emissions resulting from the project are amortized over 30 years and added to operational GHG emissions.

Regulatory Requirements

The project would comply with applicable air quality rules. In particular, the project would comply with the 2016 California Green Building Code (CALGreen), SCAQMD Rule 403 on dust control, and SCAQMD Rule 1113 on coatings, and other applicable provisions of the SCAQMD. CALGreen standards include indoor water usage reduction, regulation of outdoor water usage, and construction waste reduction. Project compliance with applicable State and local air quality regulations are not included as mitigation measures, but must be incorporated as part of the project. Rules applicable to the project are as follows.

FUGITIVE DUST CONTROL

The grading phase would involve the greatest use of heavy equipment and would generate the most fugitive dust. For the purposes of construction emissions modeling, it was assumed that the project would comply with the SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites in the Basin. Therefore, project compliance with the following conditions would be required to reduce fugitive dust pursuant to SCAQMD Rule 403, and were included in CalEEMod for the site preparation and grading phases of construction:

- **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
- **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways on the project site to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.

- **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
- **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
- **Street Sweeping.** Construction contractors should sweep all on site driveways and adjacent roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

ENGINE IDLING

In accordance with CCR Section 2485 of Title 13, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location.

ENGINE EMISSION STANDARDS

In accordance with CCR Section 93115 of Title 17, operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

ARCHITECTURAL COATINGS

The project shall comply with SCAQMD Rule 1113 limiting the volatile organic compound (VOC) content of architectural coatings. The emissions modeling for the project included the use of low-VOC paint (50 grams per liter for non-flat coatings) pursuant to SCAQMD Rule 1113.

Operational Emissions

In CalEEMod, operational sources of criteria pollutant emissions include area, energy, and mobile sources. Project uses were modeled using the following land use subtypes and square footage consistent with the project plans: 8,700 square feet (sf) of “fast food restaurant w/o drive thru,” 70,000 sf of “hotel,” 12,500 sf of “health club” based on the leasing office, fitness center and lounge, 322,600 sf of “city park” which includes open recreational space and 800 sf restroom and storage room, and 410,568 sf of gross “mid-rise residential.” In addition, a “parking lot” land use subtype was modeled with 669 parking spaces covering approximately four acres to represent parking not included in the single garages associated with the proposed residential dwelling units.

Energy Sources

Emissions from energy use include electricity and natural gas use. The emissions factors for natural gas combustion are based on USEPA’s AP-42 (*Compilation of Air Pollutant Emissions Factors*) and California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009). Natural gas emissions are calculated by multiplying the emissions factors for combustion by the project’s natural gas demand. Electricity only apply to GHG emissions (as the energy is generated off-site and therefore may not be relevant for local and regional air quality conditions) and are calculated by

multiplying the electricity use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2017). The default electricity and natural gas consumption values in CalEEMod include the California Commercial End Use Survey and Residential Appliance Saturation Survey studies sponsored by the California Energy Commission (CEC). CalEEMod currently incorporates California's 2016 Title 24 building energy efficiency standards. As the project is planned for construction beginning in 2021, with an operational date of 2025, it would be subject to at least 2019 Title 24 standards. According to the CEC, non-residential buildings built with the 2019 standards will use about 30 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Therefore, energy usage from the commercial components of the project was reduced by 30 percent to account for the requirements of 2019 Title 24 standards (CEC 2018).

To account for the energy reduction from rooftop solar, in accordance with Section 150.1(b)14 of the 2019 Building Energy Efficiency Standards, the project would be required to install photovoltaic (PV) systems on all residences that generate an amount of electricity equal to expected electricity usage. Therefore, based on the calculation method contained in Section 150.1(b)14, the project would be required to include 455 kW of PV solar panels, which would generate approximately 864,190 kWh per year (Appendix C). Therefore, the energy reduction achieved by the requisite on site PV system was included in CalEEMod as "mitigation" for the project's energy use emissions, which is a term of art for the modeling input and is not equivalent to mitigation measures that may apply to the CEQA impact analysis.

The project would be served by Southern California Edison (SCE). Therefore, SCE's specific energy intensity factors (i.e., the amount of CO_2, CH_4, and N_2O per kilowatt-hour) are used in the calculations of GHG emissions. The energy intensity factors included in CalEEMod are based on 2012 data by default at which time SCE had only achieved a 20.6 percent procurement of renewable energy (SCE 2012). Per SB 100, the statewide Renewable Portfolio Standard (RPS) Program requires electricity providers to increase procurement from eligible renewable energy sources to 60 percent by 2030. To account for the continuing effects of the RPS, the energy intensity factors included in CalEEMod were reduced based on the percentage of renewables reported by SCE. SCE energy intensity factors that include this reduction are shown in Table 4.2-5.

Table 4.2-5 SCE Energy Intensity Factors

	2012 (lbs/MWh)	2030 (lbs/MWh)
Percent procurement	20.6%	60%
Carbon dioxide (CO2)	702	353.65
Methane (CH4)	0.029	0.015
Nitrous oxide (N2O)	0.006	0.003

Source: SCE 2012

Area Sources

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates from CARB, USEPA, and emission factor values provided by the local air district (CAPCOA 2017). Area source modeling assumes compliance with SCAQMD Rule 1113, which limits the VOC content of architectural coatings.

Waste Sources

Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

According to a CalRecycle report to the Legislature, as of 2013 California had achieved a statewide 50 percent diversion of solid waste from landfills through "reduce/recycle/compost" programs (CalRecycle 2019). However, AB 341 sets a statewide goal that 75 percent of the solid waste generated be reduced, recycled, or composted by 2020. Based on the City of Norco's annual reports to CalRecycle, the City had achieved a landfill diversion rate of 65 percent in 2006 and has decreased per capita disposal rate by another 25 percent from 2006 to 2018 indicating that City of Norco is on track to achieve a 75 percent diversion rate by 2020 (CalRecycle 2019). Therefore, to account for the continuing actions of recycling requirements under State law (i.e., AB 341), an additional 25 percent solid waste diversion rate was included in CalEEMod.

Water and Wastewater Sources

CalEEMod does not incorporate water use reductions achieved by 2016 CALGreen (Part 11 of Title 24). New development would be subject to CALGreen, which requires a 20 percent increase in indoor water use efficiency. Thus, in order to account for compliance with CALGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations for new development and as a project design feature under mitigation tab in CalEEMod.

The indoor water use reduction achieved by 2016 CALGreen requirements was included in CalEEMod as "mitigation" for the project's indoor water use emissions, which is a term of art for the modeling input and is not equivalent to mitigation measures that may apply to the CEQA impact analysis.

Mobile Sources

Mobile source emissions are generated by the increase in vehicle trips to and from the project site associated with operation of proposed uses. Vehicle trips for the project were determined by the Traffic Impact Analysis (TIA) prepared by Urban Crossroads which utilized the Institute of Transportation Engineers (ITE) trip generation rates (10th Edition 2017) for multi-family housing (mid-rise) (ITE Code 221), hotel (ITE Code 310) and fast-food without drive-thru window (ITE Code 933). Because residents and patrons of the food garden/ hotel may also visit other uses on site, internal capture reduction was applied to the trip rates such that the multi-family housing generated 4.36 average daily trips (ADT) per dwelling unit, the hotel generated 6.5 ADT per room, and the food garden generated 144.14 ADT per thousand square feet (Urban Crossroads 2020). Land use and site enhancement features including increase in site density, improved destination accessibility, and increased access to transit associated with the project type and location were incorporated into CalEEMod as mitigation, which is a term of art for the modeling input and is not equivalent to mitigation measures that may apply to the CEQA impact analysis.

NITROUS OXIDE EMISSIONS

Because CalEEMod does not calculate N_2O emissions from mobile sources, N_2O emissions were quantified using guidance from CARB and the EMFAC2017 Emissions Inventory for the Riverside County region for the year 2030 (the next State milestone target year for GHG emission reductions) using the EMFAC2017 categories (CARB 2018 and 2019b; see Appendix C for calculations).

c. Project Impacts and Mitigation Measures

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

Impact AQ-1 THE ANTICIPATED GROWTH IN POPULATION, HOUSEHOLDS, AND EMPLOYMENT FROM THE PROJECT WOULD NOT EXCEED GROWTH FORECASTS USED IN THE DEVELOPMENT OF THE AIR QUALITY MANAGEMENT PLAN (AQMP), AND THE PROJECT WOULD NOT RESULT IN AN INCREASE OF AIR QUALITY EMISSIONS AND VIOLATIONS THAT CONFLICT WITH THE AQMP. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

A project may be inconsistent with the AQMP if a project generates population, housing, or employment growth exceeding forecasts used in the development of the AQMP. SCAG prepared the 2016 RTP/SCS which is a long-range transportation plan that estimates trends for regional population, housing, and employment growth to 2040. These growth trends assist SCAG in identifying regional transportation strategies to address mobility needs and form the basis for the land use and transportation control portions of the 2016 AQMP.

As stated in Section 5.3, *Population and Housing*, the City of Norco is projected to have a population of 32,100 residents by 2040 based on a 2012 population of 26,900 residents according to the 2016 RTP/SCS (SCAG 2016b). The project would generate an estimated 915 residents, based on analysis completed in the project-specific Air Quality and GHG Emissions Study (Appendix C), which would account for approximately three percent of the City's projected 2040 population, or approximately 18 percent of the residential growth anticipated for the City between 2012 to 2040. Therefore, anticipated population growth resulting from the project would be within the growth estimates forecast by SCAG and the City.

The household growth forecasts for Norco in estimate that the number of households would increase from 7,000 in 2012 to 9,200 in 2040, for a net household increase of 2,200 (SCAG 2016a). The proposed 320 dwelling units would account for 14.5 percent of the net increase in households forecast for the City by 2040. Therefore, the anticipated increase in number of households resulting from the project would be within the growth estimates forecast by SCAG and the City.

The updated growth forecasts in SCAG's 2016 RTP/SCS estimate that Norco would have 25,700 employees in 2040, for a net increase of 12,500 employees from 13,200 employees in 2012 (SCAG 2016b). Based on Riverside County employee density factors, the project could result in approximately 44 employees as shown in Table 4.2-6 (SCAG 2001). The project's anticipated contribution to the City's employee population would be less than one percent of the 2040 growth forecast. Therefore, the project would be within the employee growth estimates forecast by SCAG and the City.

Table 4.2-6 Anticipated Number of Employees Generated by Project

Project Use	Employee Rate	Proposed Size (sf)	Number of Employees
Multi-Family Residences[1]	1 per 40,332 sf	410,568	10
Regional Retail[2]	1 per 629 sf	8,700	14
Hotel	1 per 3,476 sf	70,000	20
Total			**44**

sf = square feet

[1] Low-Rise Apartments, Condominiums, and Townhouses used for proposed multi-family residences. Proposed size is based on gross square footage of proposed multi-family development.

[2] Other Retail/Svc land use subtype substituted for food garden portion of the project.

Source: SCAG 2001

In addition, the AQMP provides strategies and measures to reach attainment with the thresholds for 8-hour and 1-hour ozone and $PM_{2.5}$. As shown in Table 4.2-7 and Table 4.2-8, the project would not generate criteria pollutant emissions that would exceed SCAQMD thresholds for ozone precursors (ROG and NO_X) and $PM_{2.5}$. Since the project's anticipated growth in population, housing, and employment would be within SCAG 2016 forecasts, the project would be consistent with the AQMP. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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

Impact AQ-2 AIR POLLUTANT EMISSIONS DURING PROJECT CONSTRUCTION ACTIVITIES AND PROPOSED OPERATIONS WOULD NOT EXCEED SCAQMD THRESHOLDS FOR CRITERIA POLLUTANTS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Pursuant to CEQA Guidelines Section 15064(h)(3), the SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. If the project's mass regional emissions do not exceed the applicable SCAQMD, then the project's criteria pollutant emissions would not be cumulatively considerable.

Construction Emissions

Construction emissions are generally referred to as temporary impacts of a project, but they have the potential to represent a significant impact with respect to air quality. Fugitive dust emissions are among the pollutants of greatest concern with respect to construction activities. Emissions from construction activities can lead to adverse health effects and nuisance concerns, such as reduced visibility and soiling of exposed surfaces. General site grading operations are the primary sources of

fugitive dust emissions. However, these emissions can vary greatly, depending on the level of activity, the specific operations taking place, the number and type of equipment operated, vehicle speeds, local soil conditions, weather conditions, and the amount of earth disturbance from site grading and excavation.

Table 4.2-7 summarizes the estimated maximum daily emissions (lbs) of pollutants associated with project construction. As shown in Table 4.2-7, ROG, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds or LSTs. Because the project would not exceed SCAQMD's regional construction thresholds or LSTs, project construction would not result in a cumulatively considerable net increase of a criteria pollutant. Therefore, project construction impacts would be less than significant.

Table 4.2-7 Project Construction Emissions

	Maximum Emissions (lbs/day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Year 2021	4.3	46.5	31.6	0.1	9.3	5.8
Construction Year 2022	7.2	63.1	60.4	0.2	10.7	5
Construction Year 2023	18.4	38.2	51.6	0.1	7.5	3
Construction Year 2024	31.3	37.4	52.5	0.1	7.5	2.9
Maximum Emissions	31.3	63.1	60.4	0.2	10.7	5.8
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
SCAQMD LSTs	N/A	270	1,700	N/A	12	8
Threshold Exceeded?	**N/A**	**No**	**No**	**N/A**	**No**	**No**

Notes: See CalEEMod worksheets in Appendix C (Air Quality and Greenhouse Gas Report, Appendix A, Table 2.0 "Overall Construction-mitigated" emissions). Winter emissions results are shown for all emissions except CO and SO_2, which has higher summer emissions. Some numbers may not add up precisely to the numbers indicated due to rounding. Maximum on site emissions are the highest emissions that would occur on the project site from on-site sources, such as heavy construction equipment and architectural coatings, and includes off-site emissions from sources such as construction worker vehicle trips and haul truck trips.

Source: Rincon Consultants, Inc. 2020 (Appendix C)

Operational Emissions

Operational emissions are those associated with the general use of the project after construction. Operational emissions include mobile source emissions, energy emissions, and area source emissions for the various land uses proposed on the site. The increase in motor vehicle trips generated by the project would generate mobile source emissions. The TIA (Appendix L) provided vehicle trip generation rates for the proposed project uses. Emissions attributed to energy use include natural gas consumption for space and water heating, as well as electricity. Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coating. Long-term air pollutant emissions are those associated with stationary sources and mobile sources. Operation of the project would result in an overall increase in both stationary and mobile source emissions. Stationary source emissions would come from additional natural gas

consumption and electrical demand by on site buildings. Mobile source emissions would come from project-related vehicle trips.

Table 4.2-8 summarizes the project's operational emissions by emission source (area, energy, and mobile). As shown in Table 4.2-8, the emissions generated by project operation would not exceed SCAQMD regional thresholds for criteria pollutants. The project would not substantially contribute to existing or projected air quality violations. In addition, because criteria pollutant emissions and regional thresholds are cumulative in nature, the project would not result in a cumulatively considerable net increase of criteria pollutants. Therefore, project operational impacts would be less than significant.

Table 4.2-8 Project Operational Emissions

	Maximum Daily Emissions (lbs/day)					
Emission Source	**ROG**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	11.5	0.3	26.5	<0.1	0.1	0.1
Energy	0.3	3.1	2.1	<0.1	0.2	0.2
Mobile	3.7	16.1	31.3	0.1	9.9	2.7
Project Emissions	15.5	19.5	59.9	0.1	10.3	3.1
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: See CalEEMod worksheets in Appendix C (Air Quality and Greenhouse Gas Report, Appendix A, Table 2.2 "Overall Operational-mitigated" emissions). Winter emissions results are shown for all emissions except CO and ROG, which has higher summer emissions. Some numbers may not add up precisely to the numbers indicated due to rounding

Source: Rincon Consultants, Inc. 2020 (Appendix C)

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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

Impact AQ-3 PROJECT CONSTRUCTION ACTIVITIES WOULD EXPOSE SURROUNDING SENSITIVE RECEPTORS TO CONSTRUCTION DUST AND TOXIC AIR CONTAMINANTS. HOWEVER, CONSTRUCTION EMISSIONS AND TACS WOULD NOT EXCEED SCAQMD THRESHOLDS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Project construction activities and proposed operations would result in emissions, as discussed above; though construction and operational emissions would be below SCAQMD thresholds as shown in Table 4.2-7 and Table 4.2-8.

CO Hot Spots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 ppm or the federal and State 8-hour standard of 9.0 ppm (CARB 2016).

The Basin is in conformance with federal and State CO standards, and most air quality monitoring stations no longer report CO levels. No stations in the vicinity of the project site have monitored CO since 2012. In 2012, the Mira Loma Van Buren station, located at 5130 Poinsettia Place, approximately 6.6 miles northeast of the project site, detected an 8-hour maximum CO concentration of 1.91 ppm, which is substantially below the federal and State standards (CARB 2019a). The project would result in CO emissions of approximately 59.1 pounds per day, well below SCAQMD's 550 pounds per day threshold. Based on the low background level of CO in the project area, improving vehicle emissions standards for new cars in accordance with federal and State regulations, and the project's low level of operational CO emissions, the project would not create new hotspots or contribute substantially to existing hotspots, and impacts would be less than significant.

Toxic Air Contaminants

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2017).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 42 months in three phases. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the OEHHA, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 42 months) is approximately five percent of the total exposure period used for health risk calculation. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (Bay Area Air Quality Management District 2017).

The maximum exhaust $PM_{2.5}$ emissions, which is used to represent DPM emission for this analysis, would occur during site preparation and grading activities during phase I. These activities would last for approximately nine months. PM emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less construction equipment. While the maximum DPM emissions associated with site

preparation and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than one percent of the total exposure period for health risk calculation. Therefore, given the aforementioned, DPM generated by project construction would not create conditions where the probability is greater than one in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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

Impact AQ-4 PROJECT ODORS GENERATED DURING CONSTRUCTION ACTIVITIES WOULD BE TEMPORARY AND DISSIPATE WITH DISTANCE FROM THE PROJECT SITE. THE PROJECT DOES NOT CONTAIN LAND USES THAT ARE TYPICALLY ASSOCIATED WITH ODOR COMPLAINTS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

For construction activities, odors would be temporary in nature and are subject to SCAQMD Rule 402, *Nuisance*. Odors generated by construction activities would cease when project construction is complete. Project construction odors are not anticipated to affect a substantial number of people due to the way in which odor dissipates with distance from the project site. Therefore, construction odors from the project would have a less than significant impact.

The CARB *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) identifies land uses associated with odor complaints, typically including:

- Agricultural uses
- Auto body shops
- Manufacturing facilities
- Wastewater treatment plants
- Power plants
- Landfills
- Chemical plants
- Truck stops

The project proposes multi-family residential buildings, a food garden and outdoor recreation amenities, and a hotel building. The project would not contain land uses typically associated with objectionable odors listed above as identified by CARB. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.2.4 Cumulative Impacts

Planned and pending projects in Norco and surrounding areas are listed in Table 3-1 in Section 3, *Environmental Setting*, and include residential, commercial, and industrial land uses.

The Basin is designated a non-attainment area for the federal standards for ozone and $PM_{2.5}$.and is designated unclassifiable or in attainment for all other federal standards.

Any growth in the project area has the potential to contribute to cumulatively significant impact related to existing exceedances of ambient air quality standards. The SCAQMD's approach to determining whether a project's emissions of criteria air pollutants are cumulatively considerable is to first determine if an individual project would result in project-level impacts to regional air quality based on SCAQMD significance thresholds. If the project does not generate emissions in excess of SCAQMD thresholds, but related projects exist within a 1.0-mile radius that are part of an ongoing regulatory program (e.g., SCAQMD's Air Toxics Control Plan and AB 2588 Program aimed at reducing criteria pollutants from certain source) or are to be considered in a program EIR, then the lead agency needs to consider the additive effects of the related projects.

Neither the project nor any of the cumulative projects listed in Table 3-1 are part of an ongoing regulatory program or being studied as part of a program EIR. Therefore, the SCAQMD recommends that project-specific air quality impacts be used to determine whether a project's emissions are cumulatively considerable. As discussed in Impact AQ-1 and Impact AQ-2, project construction and operational emissions would not exceed SCAQMD standards, and anticipated growth in population, households, and employees would be within the growth estimates forecast by SCAG and for the City of Norco. Therefore, the project would not conflict with the adopted AQMP and the project would have a less than significant cumulative impact.

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4.3 Biological Resources

This section analyzes the project's potential impacts to biological resources. The analysis contains a description of the biological resource setting for the project site and the surrounding area, a discussion of potential impacts the project would have, and any mitigation measures required to reduce impacts.

The analysis is based on the Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis and Habitat Assessment prepared for the project site by Rincon Consultants, Inc. (2020) and is included as Appendix D. The MSHCP Consistency Analysis and Habitat Assessment is based on information compiled through a field reconnaissance survey conducted on January 31, 2020; focused burrowing owl surveys; and a Narrow Endemic Plant Species survey. The study area includes the project site (19.1 acres) and an additional 500-foot buffer for the burrowing owl habitat assessment and surveys.

4.3.1 Setting

The project site primarily consists of previously developed vacant land that is regularly disturbed by mowing and tilling. A large mound is present in the center of the project site with a cement foundation at the top. The remainder of the site is generally flat. Elevations on site range from 600 to 640 feet above mean sea level. The project site and vicinity are located in arid western Riverside County, which is characterized by long, hot, dry summers and short, relatively wet winters. Average temperatures range from 65 to 96 degrees Fahrenheit (°F) during the summer and 41 to 65 F during the winter. The average annual precipitation in the region is 6 to 11 inches (United States Climate Data 2020).

a. Vegetation Communities

The project site contains two land cover types as shown in Figure 4.3-1.

Disturbed Non-Native Grassland

Disturbed non-native grassland is the only vegetation community found within the project site. This community is typically dominated by a dense cover of annual grasses that usually include wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*). Disturbed non-native grassland areas on the project site are composed mostly of redstem stork's bill (*Erodium circutarium*) and common fiddleneck (*Amsinckia intermedia*) as well as old concrete foundations. Disturbed non-native grassland covers the entire site outside of the existing RV sales lot. Scattered emergent trees are also present within this vegetation community including Italian cypress (*Cupressus sempervirens*), Russian olive (*Elaeagnus angustifolia*), red gum (*Eucalyptus camaldulensis*), coast live oak (*Quercus agrifolia*), Peruvian pepper tree (*Schinus mole*), and Mexican fan palm (*Washingtonia robusta*). This vegetation community covers 15.97 acres and constitutes approximately 84 percent of the project site.

Developed

Developed land cover includes the RV lot located in the northeast corner of the project site. Developed areas have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. This land cover type covers 3.13 acres and constitutes approximately 16 percent of the project site.

Figure 4.3-1 Vegetation Communities

Imagery provided by Microsoft Bing and its licensors © 2020.

Fig 4 Vegetation Communities

b. MSHCP Jurisdictional Lands

The Western Riverside County Regional Conservation Authority (RCA) formed in 2004 to achieve an ambitious environmental effort, the MSHCP, to protect 146 native species of plants, birds, and animals, and preserve a half-million acres of habitat (RCA 2019). The project site is located in the City of Norco within the Eastvale Area Plan of the MSHCP. The project site is not located in a Cell Group or Criteria Cell.

The study area is within the approximate 2,650-square mile Santa Ana River Watershed. The Santa Ana River Watershed spans from portions of the San Jacinto Mountains, San Bernardino Mountains, San Gabriel Mountains, and Santa Ana Mountains, to the cities of Rialto, Lake Elsinore, Anaheim, Huntington Beach, and Irvine. Two major rivers drain the Santa Ana River watershed: the Santa Ana River and the San Jacinto River.

No potentially jurisdictional features were observed on site. A portion of the North Norco Channel, a 40-foot-wide concrete-lined channel, borders the project site to the southeast. The channel is separated from the project site by a chain-link fence and would not be impacted by the project. A formal jurisdictional delineation of waters and wetlands was not completed as the project is not proposed to be located within potentially jurisdictional features.

The project site is heavily disturbed due to past agricultural uses and is comprised of unvegetated developed areas and disturbed non-native grasslands dominated by exotic upland species not conducive to supporting riparian/riverine habitat. Based on the findings of the reconnaissance survey, no riparian/riverine habitat is present on the project site (Appendix D).

No potential wetlands, vernal pools, or fairy shrimp habitat were observed within the project site. The project site is underlain by moderately well drained soils and no areas of ponding or evidence of standing water were observed during the field reconnaissance survey. In addition, areas within the study area are heavily disturbed due to past agricultural uses and are comprised of unvegetated developed areas and disturbed non-native grasslands dominated by exotic upland species not conducive to supporting vernal pools or vernal pool species. No vernal pool or fairy shrimp habitat occurs within the proposed project site; and therefore, no further actions related to vernal pools are required pursuant to the MSHCP.

Additionally, based on review of aerial imagery, online data (USFWS 2020b), and the reconnaissance survey, no features subject to the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), or California Department of Fish and Wildlife (CDFW) are located within the project site.

c. General Wildlife

The study area provides limited habitat for wildlife species that commonly occur within urban communities in Riverside County. Wildlife observed include common urban-adapted species such as Say's phoebe (*Sayornis saya*), black phoebe (*Sayornis nigricans*), Eurasian collared-dove (*Streptopelia decaocto*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), California gull (*Larus californicus*), killdeer (*Charadrius vociferus*), song sparrow (*Melospiza melodia*), and yellow-rumped warbler (*Setophaga coronata*). Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Otospermophilus beecheyi*) were the only mammals detected within the study area. Western fence lizard (*Sceloporus occidentalis*) was the only reptile observed within the study area. A complete list of wildlife observed is provided in the MSHCP Consistency Analysis and Habitat Assessment Report (Appendix D).

d. Special-Status Plant and Animal Species

Special-status species are species that have been identified by federal, State, or local resource conservation agencies as threatened or endangered, under provisions of the federal and State Endangered Species Acts, due to declining or limited population sizes, usually resulting from habitat loss.

As part of the literature review completed for the MSHCP Consistency Analysis and Habitat Assessment, the CDFW's California Natural Diversity Data Base (CNDDB; CDFW 2020a), Biogeographic Information and Observation System (BIOS; CDFW 2020b) and USFWS Critical Habitat Portal (USFWS 2020a) were reviewed to determine if any special-status wildlife, plant or vegetation communities were previously recorded within five miles of the study area.

As stated above, a majority of the project site contains disturbed non-native grassland. The project site is heavily disturbed with scattered emergent trees. There were no special-status plan species observed in the study area (Appendix D). The level of disturbance and lack of native habitats means only species found in urban areas or areas with a high level of disturbance from development and invasive species have the potential to occur on the site. Therefore, no special-status plants have the potential to occur on-site and these plants will be discussed no further in this report.

Habitat suitable for burrowing owls (*Athene cunicularia*) was identified during the field reconnaissance survey/burrowing owl habitat assessment. Therefore, focused burrow and burrowing owl surveys were conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside MSHCP (Riverside County 2005).

Burrowing Owl

Burrowing owls are small crepuscular (active primarily during dusk and dawn) owls that typically modify and use burrows made by fossorial (adapted for burrowing or digging) mammals, such as California ground squirrels or American badgers (*Taxidea taxus*). Burrowing owls use a variety of natural and modified habitats for nesting and foraging, typically characterized by low growing vegetation. Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf-courses, drainage ditches, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. They also often utilize manmade structures, such as earthen berms; cement culverts; cement, asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement.

The burrowing owl habitat assessment occurred concurrently with the January 31 field reconnaissance survey. This assessment involved walking through potentially suitable habitat within the study area to achieve 100 percent visual coverage of the ground surface. Areas of particular interest included all topographic relief areas characterized by low growing vegetation, grasslands, shrub lands with low density shrub cover, earthen berms, and any large debris piles. Potential burrows, burrowing owl individuals, and/or sign (if observed) were recorded and mapped using GPS coordinates (Appendix D). The focused burrow survey was conducted concurrently with the first burrowing owl survey on March 4, 2020. Subsequent focused burrowing owl surveys were conducted on March 6, and April 1 and 3, 2020.

Eight small mammal burrow sites were recorded within the project site; however, no signs of burrowing owl were observed in the study area. The eight small mammal burrow sites consisted of Botta's pocket gopher burrows located on the central mound and California ground squirrel burrows along the southern border of the project site.

e. Narrow Endemic Plant Species

The southern portion of the project site lies within the required habitat assessment area for three Narrow Endemic Plant Species: San Diego ambrosia (*Ambrocia pumila*), Brand's phacelia (*Phacelia stellaris*), and San Miguel savory (*Satureja chandeleri*). Table 4.3-1 depicts the Narrow Endemic Plant Species' individual attributes and habitat affinities that must be addressed during habitat suitability assessments (Riverside County 2003). The study area is heavily disturbed and is dominated by disturbed non-native grasslands. The site does not contain habitat types necessary to support Narrow Endemic Plant Species (e.g., floodplain terraces, vernal pools, alkali playas, sandy washes, alluvial floodplains, coastal sagescrub, chaparral, cismontane woodland, riparian woodland). However, due to the presence of marginally suitable non-native grassland habitat, a focused survey for Narrow Endemic Plant Species was conducted on March 7, 2020 during the blooming period for the target species in accordance with Section 6.1.3 of the MSHCP. No Narrow Endemic Plant Species were observed within the project site or study area.

Table 4.3-1 Narrow Endemic Plant Species Attributes and Habitat Affinities

Common Name	Annual/ Perennial	Habitat	Soils	Blooming Period	Special Considerations
San Diego ambrosia (*Ambrosia pumila*)	Perennial	Open floodplain terraces or on the watershed margins of vernal pools. This species occurs in a variety of associations dominated by sparse non-native grasslands or ruderal habitat in association with river terraces, vernal pools, and alkali playas.	Garretson gravelly fine sandy loams when in association with floodplains, and on Las Posas loam near silty, alkaline soils of the Willow series	Appears to be primarily a clonal species that does not, under current conditions, favor sexual reproduction	A portion of San Diego ambrosia populations remain dormant in dry years, and because of its vegetative similarity with other Ambrosia spp., it is difficult to inventory in terms of identification, number of individuals, and true spatial extent of populations. Additional multi-year surveys are usually necessary to determine presence or absence of the species in superficially suitable habitats.
Brand's phacelia (*Phacelia stellaris*)	Annual	Sandy washes and/or benches in alluvial flood plains.	Sandy soils	March – June	This species is generally dependent on periodic flooding and sediment transport. Population size may vary from year to year depending upon rainfall.
San Miguel savory (Santa Rosa Plateau, Steele Rock) (*Satureja chandleri*)	Perennial	Coastal sage scrub, chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands.	Rocky, gabbroic, and metavolcanic substrates.	March – May	None

Source: Rincon Consultants, Inc. 2020 (Appendix D)

f. Urban/Wildlands Interface Guidelines

According to Section 6.1.4 of the MSHCP, the Urban/Wildlands Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The study area is not within or adjacent to a conservation area; therefore, the Urban/Wildlife Interface Guidelines are not applicable. The closest conservation area is located approximately 1.65 miles northwest of the study area and is separated from the project site by residential and commercial developments, and the Naval Surface Warfare Center Corona. The project would be confined to the existing developed and non-native grassland areas. The project site is isolated from urban/wildlands interfaces and would not significantly affect potential conservation lands. No further actions related to urban/wildlands interface guidelines are required pursuant to the MSHCP.

Additionally, the project site is not located within a mapped wildlife movement corridor according to the BIOS (CDFW 2020b). Due to the surrounding development that consists of residential, commercial, institutional, and roadway development and lack of native vegetation communities on site, the project site is not expected to serve as a significant migratory wildlife corridor.

4.3.2 Regulatory Setting

a. Federal

U.S. Fish and Wildlife Service

The USFWS implements the Migratory Bird Treaty Act (16 United States Code Section 703-711) and the Bald and Golden Eagle Protection Act (16 United States Code Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the federal Environmental Species Act (FESA) (16 United States Code Section 153 et seq.). The USFWS generally implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in “take” of any federally listed threatened or endangered species are required to obtain authorization from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of FESA, depending on the involvement by the federal government in permitting and/or funding of the project. “Take” under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. Proposed or candidate species do not have the full protection of FESA; the USFWS and NMFS advise project applicants the species could be elevated to listed status at any time.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act of 1918 was originally enacted between the United States and Great Britain (acting on behalf of Canada) for the protection of migratory birds between the two countries. The MBTA has since been expanded to include Mexico, Japan, and Russia. Under MBTA provisions, it is unlawful “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds as defined by the Migratory Bird Treaty Act except as permitted by regulations issued by the USFWS. The term “take” is defined by the USFWS regulation to mean to “pursue, hunt,

shoot, wound, kill, trap, capture or collect" any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities.

b. State

Porter-Cologne Water Quality Act

The State Water Resources Control Board (SWRCB) works in coordination with nine RWQCBs to preserve, protect, enhance, and restore water quality throughout the State. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the State. Their authority to regulate activities that could result in a discharge of dredged or fill material comes from the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act (Porter-Cologne).

Porter-Cologne broadly defines waters of the state (WoS) as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the US. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the State include headwaters, wetlands, and riparian areas. In practice, the RWQCBs may claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters and urbanized areas, jurisdiction is taken to the top of bank. The SWRCB has recently developed a Preliminary Draft State Wetland Definition that addresses numerous policy elements including development of a wetland definition and description of methodology to be used in defining wetlands as part of WoS (SWRCB 2017).

Pursuant to Section 401 of the CWA, projects regulated by the USACE must obtain a Water Quality Certification from the RWQCB. This certification ensures the proposed project will uphold State water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the State require Water Quality Certification even if the area occurs outside of USACE jurisdiction.

California Endangered Species Act

California Fish and Game Code (CFGC), Chapter 1.5, Sections 2050- 2116 (CESA) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, CDFW has jurisdiction over State-listed species pursuant to CFGC Section 2070. The CDFW regulates activities that may result in take of individuals (i.e., hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill). Habitat degradation or modification is not expressly included in the definition of take under the CFGC. The CDFW has interpreted take, however, to include the killing of a member of a species as the proximate result of habitat modification.

California Fish and Game Code

The CDFW derives its authority from the CFGC. CESA (CFGC Section 2050 et. seq.) prohibits take of State-listed threatened or endangered species. Take of fully protected species is prohibited under CFGC Sections 3511, 4700, 5050, and 5515. Section 86 of CFGC defines "take" as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, capture, or kill. This definition does not include indirect harm by way of habitat modification.

CFGC Sections 3503, 3503.5, and 3511 restrict the take, possession, and destruction of birds, nests, and eggs. Section 3503.5 of the CFGC protects all birds-of-prey and their eggs and nests against take, possession, or destruction. Fully protected birds may not be taken or possessed except under specific permit (Section 3511).

Species of Special Concern (SSC) is a category CDFW uses for those species considered to be indicators of regional habitat changes or considered to be potential future protected species. SSC do not have any special legal status except that which may be afforded by the CFGC, as noted above. CDFW intends the SSC category as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.

The CDFW also has authority to administer the Native Plant Protection Act (CFGC Section 1900 et seq.). The Native Plant Protection Act requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the Native Plant Protection Act, the owner of land where a rare or endangered native plant grows is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of plant(s).

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the CFGC (Lake and Streambed Alteration Agreements) gives CDFW regulatory authority over work in the bed, bank, and channel (which could extend to the 100-year flood plain), consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

Regional Water Quality Control Board

The SWRCB and the local Los Angeles RWQCB have jurisdiction over WoS, with federal authority under the CWA Section 401 and State authority under Porter-Cologne to protect water quality, which prohibits discharges to such waters. WoS are defined as any surface water or groundwater, including saline waters, in the boundaries of the State.

c. Local

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP is a comprehensive, multi-jurisdictional habitat conservation plan that focuses on conservation of species and their associated habitats in western Riverside County. The MSHCP Plan Area encompasses approximately 1.26 million acres (1,966 square miles); it includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, and the jurisdictional areas of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, Eastvale, Jurupa Valley, Wildomar, Menifee, and San Jacinto.

The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of FESA, as well as a natural communities conservation plan under the Natural Communities Conservation Plan Act of 2001. The MSHCP is used to allow the participating jurisdictions to authorize "take" of plant and wildlife species identified in the MSHCP Plan Area under specific conditions/measures. Under the MSHCP, USFWS and CDFW will grant "take authorization" for otherwise lawful actions in exchange for the assembly and management of a coordinated MSHCP conservation area.

City of Norco General Plan

The City of Norco General Plan Conservation Element works in conjunction with the Land Use Element to maintain and reinforce the agriculture/animal keeping/equestrian lifestyle of the City. The following policies in the General Plan Conservation Element are relevant to the project:

- **Policy 2.8.2**: As part of the development review process for all development proposals, the City should require habitat and biological assessments in areas expected to contain significant or important plant and wildlife communities identifying species types and locations Policy 2.8.3: Wildlife Mitigation Policy. The City should require development that has been found to have a potential adverse impact on sensitive species habitat to mitigate the potential impacts of proposed habitat changes.
- **Policy 2.8.4a**: Implement the requirements of the MSHCP for public and private development projects including the collection of mitigation fees.
- **Policy 2.8.4b**: Comply with the "Other Plan Requirements" of the MSHCP including requirements for: Riparian/Riverine and Fairy Shrimp Habitat; Narrow Endemic Plants; Criteria Area Survey Species; and Urban/Wildlife Interface Guidelines.
- **Policy 2.8.4c**: Employ Best Management Practices of the MSHCP in project siting and design for both public and private development projects.
- **Policy 2.8.6:** Review all new development so as to remove only the minimal amount of natural vegetation as possible and require revegetation of graded areas with native plant species consistent with public safety requirements.
- **Policy 2.8.7:** Protect and enhance known wildlife migratory corridors and help create new corridors whenever possible.

4.3.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states biological resource impacts of the project would be significant if the project would:

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;
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;
3. Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
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.

b. Methodology

Data used for this analysis includes aerial photographs, topographic maps, a CNDDB database query, accepted scientific texts to identify species, previous biological studies, survey reports prepared for the project site and the surrounding area, results of the reconnaissance field surveys, and other available literature regarding existing biological resources in and around the project area (Appendix D).

c. Project Impacts and Mitigation Measures

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

Impact BIO-1 **THE PROJECT DOES NOT CONTAIN ANY SPECIAL-SPECIES PLANTS, AND NO BURROWING OWL WERE OBSERVED ON SITE DURING FIELD SURVEYS. HOWEVER, PRE-CONSTRUCTION SURVEYS FOR BURROWING OWL WOULD BE REQUIRED FOR THE PROJECT AND MITIGATION MEASURE BIO-1 WOULD BE IMPLEMENTED IF BURROWING OWL ARE FOUND DURING PRE-CONSTRUCTION SURVEYS. IMPLEMENTATION OF MITIGATION MEASURE BIO-1 WOULD ENSURE THE PROJECT RESULTS IN A LESS THAN SIGNIFICANT IMPACT.**

As described above, no special-status plants were identified on the project site or study area (Appendix D). No suitable habitat for special-status plant species was detected on the project site during the field reconnaissance survey due to prior ground disturbance and regular vegetation abatement activities pursuant to City of Norco Municipal Code Article 9.40.020 (*Duty of owner to abate*). Based on the disturbed and maintained nature of the project site and the lack of suitable habitat, no impacts to special-status plant species are expected from the project.

A burrowing owl survey was completed for the project due to the presence of suitable habitat on the project site. As summarized above and stated in the MSHCP Consistency Analysis and Habitat Assessment (Appendix D), eight small mammal burrow sites were recorded within the project site; however, no signs of burrowing owl were observed in the study area. Pursuant to MSHCP requirements, pre-construction surveys are required on all project sites containing burrows or suitable habitat whether owls were found or not, within 30 days prior to ground disturbance to avoid direct take of burrowing owl. If burrowing owl are observed during the pre-construction survey, Mitigation Measure BIO-1 would reduce potential impacts to burrowing owl in compliance with CDFW, USFWS, and RCA. Implementation of Mitigation Measure BIO-1 would reduce potential impacts to burrowing owl to a less than significant level.

A Narrow Endemic Plant Species survey was completed, pursuant to the MSHCP guidelines. As stated above, the southern portion of the project site is located within the required habitat assessment area for three Narrow Endemic Plant Species: San Diego ambrosia (*Ambrocia pumila*), Brand's phacelia (*Phacelia stellaris*), and San Miguel savory (*Satureja chandeleri*) (Appendix D). No Narrow Endemic Plant Species were observed within the project site or study area. Therefore, the project would have no impacts to Narrow Endemic Plant Species.

Mitigation Measures

BIO-1 Burrowing Owl

A qualified biologist shall conduct a preconstruction presence/absence survey for burrowing owls within 30 days prior to site disturbance. The survey methodology shall be consistent with the methods outlined in the Burrowing Owl Survey Instructions in the MSHCP. If burrowing owl are found, the project applicant shall immediately inform the CDFW, USFWS, and RCA, and shall coordinate with these agencies to avoid or passively relocate the burrowing owl in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (2012). If burrowing owl are not found, no further action shall be needed.

The following actions shall be implemented if burrowing owl is found during the pre-construction survey:

- If burrowing owl(s) are found, buffers for occupied burrows shall be established at approximately 500 feet during the breeding season (February 1 to August 31) and at approximately 150 feet for the non-breeding season. These buffers may be adjusted in consultation with the RCA and monitored at the discretion of a qualified biologist. The buffer zone shall be clearly marked with flagging and/or construction fencing.
- If an occupied burrow cannot be avoided and the burrowing owl(s) must be moved, passive relocation techniques shall be implemented. Passive relocation includes encouraging owls to move from occupied burrows to alternate natural burrows outside of the 500-foot buffer. The MSHCP and CDFW guidance indicate that passive relocation must be conducted between September 1 and February 1 (CDFW 2012). Occupied burrows shall not be disturbed during the breeding season.
- If project construction work is delayed (does not occur within 30 days of the initial pre-construction survey) or if project activities are halted for 30 days or more, additional pre-construction burrowing owl surveys may be required as determined by the Lead Agency.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would ensure potential impacts to burrowing owl are less than significant, if burrowing owl are discovered to be present on the project site during the pre-construction survey.

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

Impact BIO-2 THE PROJECT SITE DOES NOT CONTAIN ANY RIPARIAN HABITAT, JURISDICTIONAL FEATURES, OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL PLANS, POLICIES, REGULATIONS, OR BY THE CDFW AND USFWS. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

As summarized above and stated in the MSHCP Consistency Analysis and Habitat Assessment (Appendix D), the project site is heavily disturbed due to past agricultural uses and is comprised of unvegetated developed areas and disturbed non-native grasslands dominated by exotic upland species not conducive to supporting riparian/riverine habitat. No potentially jurisdictional features were observed on the project site during the field reconnaissance survey conducted on January 31, 2020. Additionally, based on review of aerial imagery, online data, and the field reconnaissance

survey, no features subject to the jurisdiction of the USACE or RWQCB were determined to be located within the project site. Therefore, a formal jurisdictional delineation of waters and wetlands was not completed as the project site does not contain any potentially jurisdictional features.

A portion of the North Norco Channel, a 40-foot-wide concrete-lined channel, borders the project site to the southeast. The channel is separated from the project site by a chain-link fence and would not be impacted by the project. Therefore, the project would have no impact on riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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

Impact BIO-3 THE PROJECT SITE DOES NOT CONTAIN ANY WETLANDS, VERNAL POOLS, OR FAIRY SHRIMP HABITAT. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

As stated above, the project site does not contain any riparian habitat or jurisdictional features. Based on the field reconnaissance survey conducted on January 31, 2020, no potential wetlands, vernal pools, or fairy shrimp habitat were observed within the project site. The project site and study area are heavily disturbed due to past agricultural uses and are comprised of unvegetated developed areas and disturbed non-native grasslands dominated by exotic upland species not conducive to supporting vernal pools or vernal pool species. No vernal pool or fairy shrimp habitat occurs within the project site, and no further survey or protective actions related to vernal pools are required for the project and site pursuant to the MSHCP. Therefore, the project would have no impact on wetlands.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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

Impact BIO-4 **NO PROPOSED OR EXISTING MSHCP CORE AREAS, CORRIDOR LINKAGES, OR HABITAT BLOCKS ARE ON OR NEAR THE PROJECT SITE. HOWEVER, THE PROJECT SITE CONTAINS VEGETATION SUITABLE FOR NESTING BIRDS. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT ON WILDLIFE MOVEMENT CORRIDORS, AND IMPLEMENTATION OF MITIGATION MEASURE BIO-2 WOULD ENSURE PROJECT CONSTRUCTION ACTIVITIES WOULD HAVE A LESS THAN SIGNIFICANT IMPACT ON NESTING BIRDS.**

Per review of MSHCP boundaries, the project site is not within an MSHCP Criteria Cell and no proposed or existing core areas, wildlife corridor linkages, nursery sites, or habitat blocks are on or near the project site. No habitat would be fragmented or interrupted as a result of project implementation. Therefore, the project would have no impact on the movement of wildlife species.

However, the project site contains vegetation suitable for nesting birds and adjacent properties contain ornamental landscaping that may provide suitable nesting habitat for several avian species. No nesting birds or nesting behavior was observed during the field reconnaissance survey and habitat assessment (Appendix T). However, the project could adversely affect protected, native nesting birds if construction occurs while they are present on or adjacent to the site through direct mortality or abandonment of nests. A loss of a nest due to construction activities would be a violation of the CFGC 3503 and the MBTA, which protect bird nests and eggs. Therefore, implementation of Mitigation Measure BIO-2 would ensure potential project impacts to nesting birds and raptors are less than significant.

Mitigation Measures

BIO-2 Nesting Birds

If project activities must occur during the avian nesting season (February to September), a pre-construction nesting bird survey for active nests must be conducted by a qualified biologist, one to two weeks prior to construction activities. If active nests are identified and present on site, clearing and construction within 50 to 250 feet of the nest, depending on the species involved (50 feet for common urban-adapted native birds and up to 250 feet for raptors), shall be postponed until the nest is vacated and juveniles have fledged, and there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. If construction must occur within this buffer, it shall be conducted at the discretion of a qualified biological monitor to assure that indirect impacts to nesting birds are avoided.

Significance After Mitigation

Implementation of Mitigation Measure BIO-2 would ensure potential impacts to nesting birds are less than significant, if nesting birds are discovered to be present on the project site during the pre-construction survey.

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

Impact BIO-5 THE PROJECT WOULD NOT RESULT IN THE REMOVAL OF ANY STREET TREES, AND IMPLEMENTATION OF THE PROPOSED PROJECT SITE AND LANDSCAPE PLANS WOULD COMPLY WITH APPLICABLE LOCAL POLICIES AND ORDINANCES. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

Norco Municipal Code Section 12.12 regulates street trees and restricts the removal of trees planted in the right-of-way but does not have any policies or ordinances which prevent the removal of trees on private property. The existing street trees along Third Street would remain in place; no public right-of-way street trees are anticipated to be removed as part of the project. However, if the project would result in removal of trees within the public right-of-way, coordination and cooperation with the City may be required and permits for tree removal may need to be obtained. Proposed landscaping would comply with the applicable provisions of Norco Municipal Code Section 12.12. The project would not conflict with any local policies or ordinances protecting biological resources. Therefore, the project would have no impact.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 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?

Impact BIO-6 THE PROJECT WOULD COMPLY WITH APPLICABLE PROVISIONS OF THE MSHCP. THEREFORE, IMPLEMENTATION OF MITIGATION MEASURES BIO-1 AND BIO-2 WOULD ENSURE THE PROJECT HAS A LESS THAN SIGNIFICANT IMPACT.

As summarized above and stated in the MSHCP Consistency Analysis and Habitat Assessment (Appendix D), the project site is located within the Eastvale Area Plan of the MSHCP. The project site is within the Narrow Endemic Plant Species Survey Area and Burrowing Owl Survey Area for the MSHCP (Appendix D); and a Narrow Endemic Plant Species Survey and Burrowing Owl Survey were completed for the project site.

No Narrow Endemic Plant Species were observed on the project site; no burrowing owl were observed on the project site, but in accordance with the MSHCP, Mitigation Measure BIO-1 would require pre-construction survey for borrowing owl to ensure project impacts are less than significant.

As stated above, the project site is not within or adjacent to a MSHCP conservation area; therefore, the Urban/Wildlife Interface Guidelines are not applicable. No further actions related to urban/wildlands interface guidelines are required pursuant to the MSHCP. However, the project site contains vegetation suitable for nesting birds. No nesting birds or nesting behavior was observed during the field reconnaissance survey and habitat assessment (Appendix D). However, the project could adversely affect protected, native nesting birds if construction occurs while they are present on or adjacent to the site through direct mortality or abandonment of nests. Therefore,

implementation of Mitigation Measure BIO-2 would ensure potential project impacts to nesting birds and raptors are less than significant.

Therefore, implementation of Mitigation Measures BIO-1 and BIO-2 would ensure the project has less than significant impacts related to the MSHCP.

Mitigation Measures

Mitigation Measures BIO-1 and BIO-2 would be required.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would ensure potential impacts to burrowing owl are less than significant, if burrowing owl are discovered to be present on the project site during the pre-construction survey.

Implementation of Mitigation Measure BIO-2 would ensure potential impacts to nesting birds are less than significant, if nesting birds are discovered to be present on the project site during the pre-construction survey.

Therefore, potential project impacts would be less than significant with implementation of Mitigation Measures BIO-1 and BIO-2.

4.3.4 Cumulative Impacts

Currently planned and pending projects in Norco and surrounding areas, including the City of Eastvale and the City of Corona, are listed in Table 3-1 in Section 3, *Environmental Setting.*

The following factors are considered with respect to analyzing cumulative impacts to biological resources:

- The cumulative contribution of other approved and proposed projects to fragmentation of open space in the project vicinity
- The loss of sensitive habitats and species
- The contribution of the project to urban expansion into natural areas
- Isolation of open space in the vicinity by proposed/future projects

Cumulative impacts depend on the proximity of cumulative projects to the project site and impacts from past projects in the vicinity. Native vegetation communities and open areas have almost entirely been developed in the region of the project. Over the last half-century or more, naturally vegetated open areas diminished as the landscape surrounding the project site has been built out with residential and commercial uses.

The cumulative study area for biological resources includes the western Riverside County region, which contains many residential, industrial, and previously disturbed but undeveloped areas, such as the project site. As previously stated, the project site provides limited potential for special-status plants, burrowing owl, migratory bird species, and does not contain any jurisdictional resources. Cumulatively considerable impacts to these limited biological resources would not occur from the project with implementation of Mitigation Measures BIO-1 and BIO-2.

Special-Status Wildlife Species

Mitigation Measure BIO-1 would avoid potential direct impacts to burrowing owl. The project would not result in potentially significant impacts related to special-status wildlife species. The project would not contribute to cumulative impacts to burrowing owl, and the project would not contribute to the cumulative loss of any special-status wildlife species. Therefore, cumulative impacts related to wildlife species would be less than cumulatively significant.

Migratory and/or Nesting Birds

Mitigation Measure BIO-2 is included to avoid impacts to nesting birds and raptors through compliance with the CFGC and MBTA, which would avoid the potential of the project to contribute to cumulative effects to nesting birds. As described above, the loss of potential nesting and foraging habitat for bird species is less than significant due to the limited resources on the project site due to disturbed landscape and vicinity due to existing development. Because the region consists of similar limited biological resources for bird species, the less than significant impacts from the project are not anticipated to combine with other development projects to cause substantial adverse impacts on nesting birds. Therefore, cumulative impacts related to migratory and/or nesting birds would be less than cumulatively significant.

Jurisdictional Drainages

The project site does not contain any jurisdictional features, riparian habitat, or wetlands, and implementation of the project would have no impact. Therefore, the project would not contribute to a net loss of function and/or value of jurisdictional resources in the region. Therefore, cumulative impacts related to the project would be less than cumulatively significant.

MSHCP

As discussed above, project impacts related to the MSHCP would be less than significant with implementation of Mitigation Measures BIO-1 and BIO-2, which would ensure that applicable MSHCP regulations are implemented for the project. These mitigation measures would ensure the project does not contribute to a cumulative impact with respect to MSHCP implementation. Therefore, the project would result in a less than significant contribution to cumulative impacts to the MSHCP, and impacts would be less than cumulatively significant.

In addition, individual development proposals are reviewed separately by the appropriate jurisdiction and undergo appropriate environmental review when it is determined that the potential for significant impacts exist. If future projects would result in impacts to sensitive habitats and biological resources, impacts to such resources would be addressed on a case-by-case basis for each project and site. Furthermore, all projects in the City of Norco are required to comply with the MSHCP. As such, projects, including the proposed project, would not contribute to cumulative impacts on sensitive habitats and biological resources outside the project site. Therefore, impacts related to sensitive habitats and biological resources would not be cumulatively considerable.

4.4 Cultural and Tribal Cultural Resources

This section evaluates the project's potential impacts to cultural and tribal cultural resources (TCR). The analysis consists of the identification and evaluation of the significance of any cultural resources within the project area and area of potential impacts; a determination if implementation of the proposed project would have any adverse impacts on those resources; and identification of mitigation measures for any significant impacts (pursuant to CEQA Guidelines Section 15126.2) on cultural and tribal cultural resources.

The analysis is based on the Cultural Resources Assessment Report (Cultural Report) prepared for this project by Rincon Consultants, Inc. (2020) and is included as Appendix E. The Cultural report is based on information compiled through a review of cultural resource records searches and a field reconnaissance survey conducted on February 18, 2020. Project impacts on TCRs are based on the results of consultation completed with local California Native Americans, conducted pursuant to Assembly Bill (AB) 52. Consultation records are included in Appendix F.

4.4.1 Setting

a. Ethnographic Overview

The Cultural Report includes an ethnographic overview for the project site and region, summarized here (Appendix E).

The project site is situated in a region historically occupied by a Native American group known as the Cahuilla, though near the boundary with the Juaneño and Luiseño (Heizer 1978; Bean 1978; Kroeber 1925). The term Cahuilla likely derived from the native word *káwiya*, meaning "master" or "boss" (Bean 1978:575). Traditional Cahuilla ethnographic territory extended west to east from the present-day city of Riverside to the central portion of the Salton Sea in the Colorado Desert, and south to north from the southern extent of the San Jacinto Valley to the San Bernardino Mountains.

The Cahuilla, like their neighbors to west, the Luiseño and Juaneño, and the Cupeño to the south, are speakers of a Cupan language. Cupan languages are part of the Takic linguistic subfamily of the Uto-Aztecan language family. It is thought that the Cahuilla migrated to southern California approximately 2,000 to 3,000 years ago, most likely from the southern Sierra Nevada mountain ranges of east-central California with other Takic speaking social groups (Moratto 1984:559).

Cahuilla social organization was hierarchical and contained three primary levels (Bean 1978:580). The highest level was the cultural nationality, encompassing everyone speaking a common language. The next level included the two patrimoieties of the Wildcats (*tuktum*) and the Coyotes ('*istam*). Every clan of the Cahuilla was in one or the other of these moieties. The lowest level consisted of the numerous political-ritual-corporate units called sibs, or a patrilineal clan (Bean 1978:580).

Cahuilla villages were usually located in canyons or on alluvial fans near a source of accessible water. Each lineage group maintained their own houses (*kish*) and granaries, and constructed ramadas for work and cooking. Sweat houses and song houses (for non-religious music) were also often present. Each community also had a separate house for the lineage or clan leader. Houses and ancillary structures were often spaced apart, and a "village" could extend over a mile or two. Each lineage had ownership rights to various resource collecting locations, "including food collecting, hunting, and other areas. Individuals also owned specific areas or resources, e.g., plant foods,

hunting areas, mineral collecting places, or sacred spots used only by shamans, healers and the like" (Bean 1990:2).

The Cahuilla hunted a variety of game, including mountain sheep, cottontail, jackrabbit, mice, and wood rats, as well as predators such as mountain lion, coyote, wolf, bobcat, and fox. Various birds were also consumed, including quail, duck, and dove, plus various types of reptiles, amphibians, and insects. The Cahuilla employed a wide variety of tools and implements to gather and collect food resources. For the hunt, these included the bow and arrow, traps, nets, slings and blinds for hunting land mammals and birds, and nets for fishing.

Foodstuffs were processed using a variety of tools, including portable stone mortars, bedrock mortars and pestles, basket hopper mortars, manos and metates, bedrock grinding slicks, hammerstones and anvils, and many others. Food was consumed from a number of woven and carved wood vessels and pottery vessels. Pottery vessels were made by the Cahuilla and traded from the Yuman-speaking groups across the Colorado River and to the south.

The Cahuilla had adopted limited agricultural practices by the time Euro-Americans traveled into their territory. Bean (1978:578) has suggested that their "proto-agricultural techniques and a marginal agriculture" consisting of beans, squash and corn may have been adopted from the Colorado River groups to the east. By the time of the first Romero Expedition in 1823-24, they were observed growing corn, pumpkins, and beans in small gardens localized around springs in the Thermal area of the Coachella Valley (Bean and Mason 1962:104). The introduction of European plants such as barley and other grain crops suggest an interaction with the missions or local Mexican rancheros. Despite the increasing use and diversity of crops, no evidence indicates that this smallscale agriculture was anything more than a supplement to Cahuilla subsistence, and it apparently did not alter social organization.

By 1819, several Spanish mission outposts, known as *assistencias*, were established near Cahuilla territory at San Bernardino and San Jacinto. Cahuilla interactions with Europeans at this time were not as intense as it was for native groups living along the coast. This was likely due to the local topography and lack of water, which made the area less attractive to colonists. By the 1820s, European interaction increased as mission ranchos were established in the region and local Cahuilla were employed to work on them.

Between 1875 and 1891, the United States established ten reservations for the Cahuilla within their traditional territory. These reservations include Agua Caliente, Augustine, Cabazon, Cahuilla, Los Coyotes, Morongo, Ramona, Santa Rosa, Soboba, and Torres-Martinez (Bean 1978:585). Four of the reservations are shared with other groups, including the Chemehuevi, Cupeño, and Serrano.

b. Historic Overview

Post-European contact history for California is divided generally into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present), included here and in the Cultural Report (Appendix E).

Spanish Period (1769-1822)

Spanish exploration of what was known as Alta (upper) California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968;

Rolle 2003). Spanish entry into what was to become Riverside County did not occur until 1774 when Juan Bautista de Anza led an expedition from Sonora, Mexico to Monterey in northern California (Lech 1998).

In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. The establishment of the missions marks the first sustained occupation of Alta California by the Spanish. In addition to the missions, four presidios and three pueblos (towns) were established throughout the state (State Lands Commission 1982).

During this period, Spain also deeded ranchos to prominent citizens and soldiers, though very few in comparison to the subsequent Mexican Period. To manage and expand their herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population (Engelhardt 1927a). The missions were responsible for overseeing local Indians who assisted with the ranching as well as converting the population to Christianity (Engelhardt 1927b). The influx of European settlers brought the local Native American population in contact with European diseases against which they had no immunity, resulting in catastrophic reduction in native populations throughout the state (McCawley 1996).

Mexican Period (1822-1848)

The Mexican Period commenced when news of the success of the Mexican War of Independence (1810-1821) reached California in 1822. This period saw the federalization of mission lands in California with the passage of the Secularization Act of 1833. This Act enabled Mexican governors in California to distribute former mission lands to individuals as land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). Fifteen of these land grants (ranchos) were in Riverside County.

American Period (1848-Present)

The American Period began officially with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for ceded territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming, and pay an additional $3.25 million to settle American citizens claims against Mexico. Settlement of southern California continued dramatically in the early American Period. Americans bought or otherwise acquired many ranchos in the county, after which most were subdivided into agricultural parcels or towns.

The discovery of gold in northern California in 1848 led to the California Gold Rush, despite the first California gold being discovered previously in southern California at Placerita Canyon in 1842 (Guinn 1977; Workman 1935:26). Southern California remained dominated by cattle ranches in the early American period, though droughts and increased population resulted in farming and other more urban professions supplanting ranching through the late nineteenth century. In 1850, California was admitted into the United States and by 1853, the population of the state exceeded 300,000. Thousands of settlers and immigrants continued to move into the state, particularly after completion of the transcontinental railroad in 1869.

City of Norco

The project site is located in Norco, Riverside County, California. Although present-day Norco was not part of any mission rancho, the Mission San Gabriel, 33 miles northwest of the project site, used

the area to graze cattle. In 1846, Mexican governor Pio Pico granted these lands, known as La Sierra, to Senora Vicenta Sepulveda, marking one of the few occasions land grants were given to a woman. Officially named Rancho La Sierra Sepulveda, the grant totaled 17,774 acres (Bash and Bash 2013).

In 1872, Rancho La Sierra Sepulveda was sold to the Stearns Rancho Company, who used the lands almost exclusively for raising alfalfa. Established in 1909, Citrus Belt was the first community within Norco Valley and was home to Anglo pioneers in search of land and opportunity. Due to the difficulty of farming along the Santa Ana River flood plain within the Santa Ana winds-exposed and frost-prone valley, the population remained sparse. The community was bought in the early 1920s by Rex Clark, who renamed it Norco in 1923, and attempted to revitalize the economy through poultry farming (Bash and Bash 2013).

Although Clark's plan to develop a downtown was derailed by the Great Depression, Norco underwent a period of population growth and economic expansion during the 1940s and 50s spurred by the construction of a major U.S. Naval Hospital within the City's limits. Despite moderate suburbanization, Norco prioritizes rural lifeways by fostering an equestrian-oriented community. Today, Norco promotes itself as "Horsetown USA," maintains a transportation infrastructure that consists of horse trails throughout town, and its community members have consistently voted to protect animal keeping rights controlled through zoning and lot size (City of Norco 2020a). Local government strives to balance this ethos with its need to stimulate economic growth through residential and commercial development (Bash and Bash 2013; City of Norco 2020b).

4.4.2 Regulatory Setting

a. Federal

Native American Involvement

Several federal and State laws address Native American involvement in the development review process. The most notable of these are the federal Native American Graves Protection and Repatriation Act (1990) and the California Native American Graves Protection and Repatriation Act (2001). These acts ensure that Native American human remains and cultural items be treated with respect and dignity.

b. State

California Public Resources Code

California Public Resources Code (PRC), Sections 5097-5097.6, state that the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands is a misdemeanor. It prohibits the knowing destruction of objects of antiquity without a permit (express permission) on public lands, and it provides for criminal sanctions. This section was amended in 1987 to require consultation with the Native American Heritage Commission (NAHC) whenever Native American graves are found. Violations that involve taking or possessing remains or artifacts are felonies. As such, PRC Section 5097.5 states:

> "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 the lands….A violation of this section is a misdemeanor."

Here "public lands" means those owned by or under the jurisdiction of the State or any city, county, district, authority, public corporation, or any agency thereof. Consequently, local agencies are required to comply with PRC Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

California Health and Safety Code 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code (PRC Section 7050.5 et seq.) requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County Coroner has examined the remains (Section 7050.5b).

PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (PRC Section 7050.5c). The NAHC will notify a Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Senate Bill 18

Enacted on March 1, 2005, Senate Bill (SB) 18 (California Government Code Sections 65352.3 and 65352.4) requires cities and counties to notify and consult with California Native American tribal groups and individuals regarding proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places (sacred sites), prior to adopting or amending a General Plan or designating land as open space. Tribal groups or individuals have 90 days to request consultation following the initial contact.

Assembly Bill 52

California Assembly Bill (AB) 52 of 2014 was enacted in 2015, expanding CEQA by defining a new resource category: "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and that are either:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the

lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding TCRs that must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed under the jurisdiction of the lead agency.

c. Local

City of Norco General Plan

The City of Norco General Plan Land Use Element includes an archaeological resources policy, which states the City will identify and catalogue any archaeological resources and will take measures to preserve those resources that are considered unique and significant to the area's history. The following policies related to archaeological resources are relevant to the project:

- **Policy 2.7.2a:** The City should collect, record, and/or mitigate archaeological resources to the level consistent with the related value of each item in terms of historical significance and importance.
- **Policy 2.7.2b:** New development requiring discretionary approval from the Planning Commission shall be approved with a condition that requires any construction activity to stop upon discovery of archaeological resources until such time as a qualified archaeologist, retained by the property owner or developer, has investigated the site and made recommendations regarding the disposition of any items. Human remains shall not be moved until the Riverside County Coroner's Office has been notified.
- **Policy 2.7.2c:** New development shall be coordinated with Native American tribes that have a historical presence and interest in the Norco region, or any other groups with historical interest.

4.4.3 Impact Analysis

a. Significance Thresholds

Cultural Resources

Appendix G of the CEQA Guidelines states cultural resource impacts of the project would be significant if the project would:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
3. Disturb any human remains, including those interred outside of formal cemeteries.

Tribal Cultural Resources

The significance criteria used to evaluate the project impacts to TCRs are based on Appendix G of the CEQA Guidelines. A significant impact related to TCRs would occur if the project would 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:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
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 PRC Section 5024.1(c). In applying the criteria set forth in PRC Section 5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.

b. Methodology

Cultural Resources

The analysis of cultural resources impacts is based on empirical research presented in the Cultural Resources Assessment Report prepared for the project (Appendix E).

Cultural Resources Records Search

A cultural resource records search and literature review was conducted at the Eastern Information Center, at the University of California, Riverside, of the California Historical Resources Information System on February 10, 2020. The search was performed to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a one-mile radius surrounding it. The CHRIS search included a review of previous cultural resource studies and recorded resources, as well as a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations Eligibility list. The records search also included a review of historical aerial photographs.

Previously Identified Cultural Resources

The Eastern Information Center records search identified 31 previously recorded cultural resources within a one-mile radius of the project site, shown in Table 4.4-1. None of these 31 previously recorded cultural resources are located within the project site. Additionally, 40 previously conducted cultural resource studies were performed within a one-mile radius of the project site, none of which include the project site.

Table 4.4-1 Previously Recorded Resources within a 1.0-mile radius of the Project Site

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/ CRHR Status
33-001230	CA-RIV-001230	Prehistoric site	Sparse lithic scatter (no cultural material identified during 1984 site update)	Eastvold 1977; Drover 1984	Not evaluated
33-002315	CA-RIV-002315	Prehistoric site	Four bedrock milling features	Feickert and Bjornsen 1980; Drover 1987	Not evaluated

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/ CRHR Status
33-002316	CA-RIV-002316	Prehistoric site	One bedrock milling feature	Feickert and Bjornsen 1980; McCarthy 1985; Drover 1987	Not evaluated
33-002317	CA-RIV-002317	Prehistoric site	Six bedrock milling features	Feickert and Bjornsen 1980; Drover 1987	Not evaluated
33-003002	CA-RIV-003002	Prehistoric site	One bedrock milling feature	McCarthy 1985; Drover 1987	Not evaluated
33-009101	-	Historic building	Lake Narconian Club	Urbas 1999	NRHP nominated
33-012123	-	Historic building	U.S. Navy office building	Crawford 1992	Found NRHP/CRHR ineligible
33-019896	-	Historic site	Foundations/footings	Goodwin 2011	NRHP/CRHR ineligible
33-019897	-	Historic site	Foundations/footings	Goodwin 2011	NRHP/CRHR ineligible
33-019898	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019899	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019900	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019901	-	Historic building	Single family residence	Tibbet 2011	Ineligible for local listing
33-019902	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019903	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019905	-	Historic building	Commercial building	Tibbet 2011	NRHP/CRHR ineligible
33-019906	-	Historic building	Norco Egg Ranch	Tibbet 2011	Appears to be eligible for local listing
33-019907	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019908	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019909	-	Historic building	Multi-family property	Tibbet 2011	NRHP/CRHR ineligible
33-019910	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/ CRHR Status
33-019911	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019912	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019913	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019914	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-019937	-	Historic building	Single family residence	Tibbet 2011	NRHP/CRHR ineligible
33-021037	-	Historic feature	Light pole	Crawford 2011	NRHP/CRHR ineligible
33-024099	-	Historic canal	South Norco Channel	Evans 2014	NRHP/CRHR ineligible
33-024100	-	Historic feature	Concrete weir box	Evans 2014	NRHP/CRHR ineligible
33-028176	-	Prehistoric isolate	Mano	Moslak 2018	NRHP/CRHR ineligible
33-028889	-	Historic District	Formerly the Lake Narconian Resort, presently a Naval Hospital	Wilkman 2019	Appears NRHP eligible

Source: Rincon Consultants, Inc. 2020 (Appendix E)

Cultural Resources Survey

A Rincon archaeologist conducted a pedestrian survey of the project site on February 18, 2020 using transects spaced no greater than 15 feet apart. Ground visibility on the project site was poor throughout (approximately 0 to 5 percent visibility), due to the presence of high grasses, remnant foundations, and paved surfaces with minimal areas of exposed ground surface. Except for a central raised area, the remainder of the project site has been previously graded. The entire project site is disturbed from past agricultural activities and other means of development. No prehistoric or built environment resources were identified during the survey.

One historic-period archaeological site, RIN-S-1 (temporary site number), consisting of 14 historic-period features, was identified on the project site and was evaluated for listing in the NRHP and CRHR. Department of Parks and Recreation 523 Series Forms were included in the Cultural Report (Appendix E).

The 14 historic-period features that comprise RIN-S-1 are situated on three parcels, all of which are vacant and one of which is part of the project site (APN 129-380-010). Features 1 through 12 are concrete building foundations associated with former farm properties and Features 13 and 14 are a rock alignment and a driveway, respectively. Table 4.4-2 lists the 14 features that were identified during the field survey.

Table 4.4-2 Historic Period Archaeological Features at RIN-S-1

Feature No.	Historic Period Feature Description	Length and Width of Feature	Height of Feature
1	Concrete slab foundation	24 feet by 26 feet	Flush with ground level
2	Concrete slab foundation	20 feet by 24 feet	Flush with ground level
3	Concrete slab foundation	50 feet by 42 feet	Flush with ground level
4	Concrete slab foundation	15 feet by 24 feet	Flush with ground level
5	Concrete slab foundation	15 feet by 60 feet	Flush with ground level
6	Concrete building foundation	16 feet by 11 feet	4 feet at highest point
7	Concrete pillars (9)	9-inch diameter	1-2 feet
8	Concrete building foundation	3.3 feet by 9.5 feet	Flush with ground level
9	Concrete building foundation	50 feet by 50 feet	Flush with ground level
10	Concrete perimeter building foundation	60 feet by 10 feet	Flush with ground level
11	Concrete perimeter building foundation	30 feet by 40 feet	Flush with ground level
12	Concrete perimeter building foundation	16 feet by 24 feet	1-2 feet
13	Rock alignment	30 feet by 2 feet	1-3 feet
14	Paved driveway	300 feet by 40 feet	Flush with ground level

Source: Rincon Consultants, Inc. 2020 (Appendix E)

Research did not suggest any of the 14 features were an important physical expression of specific events or periods in the City's history. Thus, the features do not meet the eligibility criteria for listing under NRHP Criterion A or CRHR Criterion 1. Likewise, research did not indicate that any persons associated with the former farm properties or former drive-in theatre can be considered significant to local, state, or national history. Therefore, the features do not meet the eligibility criteria for listing under NRHP Criterion B or CRHR Criterion 2. The building foundations and structural remnants that are present on the project site are so fragmentary that the original function associated with these remains is no longer recognizable. Furthermore, the historic features lack any technological, architectural, or engineering merits. As such, the features do not meet the eligibility criteria for listing under NRHP Criterion C or CRHR Criterion 3. Lastly, the remnant features at this location are fragmentary pieces of former farms and a component of a former drive-in theatre, and are unable to yield any new information important to the study of the construction or use of facilities of their particular type or vintage in local, state, or national history. Therefore, the features are not eligible for listing on the NRHP and CRHR under Criterion D and Criterion 4 (Appendix E).

Tribal Cultural Resources

Potential impacts on TCRs are analyzed based on project impacts incurred during project construction and operation. The significance of a TCR and subsequent significance of any impact is determined by, among other things, consideration of whether or not that resource has heritage value to California Native Americans. This impact analysis is based on consultations with the interested tribal representatives.

Rincon contacted the NAHC on February 6, 2020, to request a Sacred Lands File (SLF) search of the project site and a 1.0-mile radius surrounding it. As part of this request, Rincon asked the NAHC to provide a list of Native American groups and/or individuals culturally affiliated with the area who may have knowledge of cultural resources within the project site. The NAHC responded on

February 20, 2020, stating the results of the SLF search were positive with instructions to contact the relevant local Native American groups (Appendix E). An SLF search is completed by topographic quadrangle. A positive SLF result is returned if any sacred sites are identified within the quadrangle, but no specific locational information is provided. Thus, the sacred site may be located a considerable distance from the current project site. The positive SLF result may be related to the fact that there are six prehistoric resources previously recorded within a one-mile radius of the project site. According to the EIC records search results, no prehistoric resources have been recorded within the project site.

In compliance with AB 52, the City sent letters to the 29 NAHC-listed contacts across the 26 tribes listed below on June 9, 2020 that may have knowledge regarding tribal cultural places or heritage sites on the project site and vicinity:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Mission Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians
- Campo Band of Diegueno Mission Indians
- Ewiiaapaayp Band of Kumeyaay Indians
- Gabrieleno Band of Mission Indians - Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino /Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Jamul Indian Village
- La Posta Band of Diegueno Mission Indians
- Los Coyotes Band of Cahuilla and Cupeño Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Diegueno Mission Indians
- Morongo Band of Mission Indians
- Pechanga Band of Luiseno Indians
- Ramona Band of Cahuilla
- San Fernando Band of Mission Indians
- San Pasqual Band of Diegueno Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseño Indians
- Sycuan Band of the Kumeyaay Nation
- Torres-Martinez Desert Cahuilla Indians
- Viejas Band of Kumeyaay Indians

The City received one request to consult from the Soboba Band of Luiseño Indians. As the CEQA lead agency, the City of Norco conducted Native American consultation for the project in compliance with AB 52. The Soboba Band of Luiseño Indians (Soboba) was the only tribe that requested

government-to-government consultation. Tribal consultation with Soboba representatives, led by the City of Norco, is ongoing (Appendix F).

c. Project Impacts and Mitigation Measures

Cultural Resources

Threshold 1:	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?
Threshold 2:	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Impact CUL-1 NO KNOWN HISTORICAL OR ARCHAEOLOGICAL RESOURCES ARE PRESENT ON THE PROJECT SITE. HOWEVER, PROJECT CONSTRUCTION WOULD INVOLVE GROUND-DISTURBING ACTIVITIES, SUCH AS GRADING AND SURFACE EXCAVATION, WITH THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PREVIOUSLY UNIDENTIFIED ARCHAEOLOGICAL RESOURCES. IMPLEMENTATION OF MITIGATION THEREFORE, THE PROJECT WOULD ENSURE THE PROJECT RESULTS IN A LESS THAN SIGNIFICANT IMPACT.

As summarized above and in the Cultural Resources Assessment Report (Appendix E), the project site does not contain any historical resources, as it is largely vacant with signs of previous ground disturbance and vegetation management activities. Resource RIN-S-1, which consists of 14 features as listed in Table 4.4-2, has been recommended as ineligible for listing on the CRHR and NRHP due to lack of integrity and historical association. Demolition and removal of these remnant foundation features from prior uses on the project site would not result in a significant adverse impact. The background research and field survey, summarized above, concluded there are no known prehistoric archaeological resources or built environment resources within the project site.

Proposed construction activities on the project site, including ground clearing, grading, and excavation, could have significant impacts on previously unidentified archaeological resources. Based on the preliminary analysis of site conditions and grading plans, the project's anticipated maximum depth of excavation would be approximately 30 feet. Pre-construction reconnaissance would be needed due to the possibility for encountering subsurface archaeological resources during construction activities, including site excavation. Previously unrecorded archaeological resources, if present within the project site, could be damaged or destroyed during ground disturbance undertaken for project implementation. Adverse physical effects to or destruction of archaeological resources would result in a significant impact. Therefore, implementation of Mitigation Measure CUL-1 would ensure project impacts to archaeological resources are less than significant.

Mitigation Measures

CUL-1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under the National Historic Preservation Act and/or CEQA and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts/adverse effects.

Significance After Mitigation

Implementation of Mitigation Measure CUL-1 would ensure potential impacts to previously unknown/unidentified cultural resources are less than significant, if such resources are discovered during project construction activities.

Threshold 3:	Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact CUL-2 NO KNOWN HUMAN REMAINS ARE PRESENT ON THE PROJECT SITE. HOWEVER, PROJECT CONSTRUCTION WOULD INVOLVE GROUND-DISTURBING ACTIVITIES SUCH AS GRADING AND SURFACE EXCAVATION, WHICH HAVE THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PREVIOUSLY UNIDENTIFIED HUMAN REMAINS. IMPLEMENTATION OF MITIGATION MEASURE CUL-2 WOULD ENSURE THE PROJECT RESULTS IN A LESS THAN SIGNIFICANT IMPACT.

The project site has been previously disturbed and shows evidence of vegetation management. The project site has not been previously used as a cemetery and there is no evidence indicating the possible presence of human remains in the project site (Appendix E). However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found during project development, the State of California 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. Therefore, implementation of Mitigation Measure CUL-2 would ensure project impacts to previously unidentified human remains are less than significant.

Mitigation Measures

CUL-2 Unanticipated Discovery of Human Remains

In the event of an unanticipated discovery of human remains, all work on the project site shall be halted pursuant to California Health and Safety Code Section 7050.5 and the Riverside County coroner shall be notified immediately. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, the coroner shall determine and notify as most likely descendant by telephone within 24 hours. The most likely descendant shall complete an inspection of the site and discovered human remains within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Additionally, Mitigation Measures TCR-1A, TCR-1B, and TCR-1C, stated below, would apply and further reduce potential impacts by supporting Native American monitoring, and providing for the respectful treatment and disposition in the event that tribal cultural are found during ground-disturbing activities.

Significance After Mitigation

Adherence to California health and Safety Code and implementation of Mitigation Measures CUL-2, TCR-1A, TCR-1B, and TCR-1C would ensure potential impacts to previously unknown/unidentified human are less than significant, if such resources are discovered during project construction activities.

Tribal Cultural Resources

Threshold 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: a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)?, or b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Impact TCR-1 NO KNOWN TRIBAL CULTURAL RESOURCES ARE PRESENT ON THE PROJECT SITE. HOWEVER, PROJECT CONSTRUCTION WOULD INVOLVE GROUND-DISTURBING ACTIVITIES SUCH AS GRADING AND SURFACE EXCAVATION, WITH THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PREVIOUSLY UNIDENTIFIED TRIBAL CULTURAL RESOURCES. IMPLEMENTATION OF MITIGATION MEASURES TCR-1, TCR-2, AND TCR-3 WOULD ENSURE THE PROJECT RESULTS IN A LESS THAN SIGNIFICANT IMPACT.

AB 52 requires meaningful consultation between lead agencies and California Native American tribes regarding potential impacts on TCRs. As described above, TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the CRHR or local register of historical resources (PRC Section 21074). As outlined above, the City sent letters to 29 Native American representatives across 26 tribes in June 2020, notifying them of the project in accordance with AB 52 (Appendix F).

As stated above, the results of the SLF search were positive and Rincon sent letters to the 29 NAHC-listed contacts in March 2020 for additional resource information (Appendix E). No tribal entities responded to the positive SLF results. The City received one request to for consultation under AB 52 from the Soboba Band of Luiseño Indians (Pechanga) and a consultation is ongoing (Appendix F). Although the SLF search yielded a positive result, there is no indication that a sacred site exists within the project site.

However, grading and ground-disturbing activities during project construction could impact currently unknown subsurface cultural resources of tribal or Native American importance. The City of Norco and the consulting tribe agreed that, in the event of the discovery of previously unknown cultural resources of tribal or Native American importance during construction activities, appropriate mitigation measures would be followed.

Mitigation Measures

Avoidance or preservation in place of a previously unknown tribal cultural resource would be preferred in the event that such a resource is discovered on the project site during ground disturbing activities. However, if avoidance or preservation in place of the resource is not feasible and/or recommended by the qualified archaeologist or Native Tribal American monitor(s), Mitigation Measures CUL-1 and CUL-2 would be implemented to reduce potential project impacts and ensure proper handling of the discovered resource. Additionally, Mitigation Measures TCR-1,

TCR-2, and TCR-3 support tribal monitoring for the project and provides for the respectful treatment and disposition of any TCRs discovered during project development.

TCR-1 Tribal Monitoring

Prior to the issuance of a grading permit, the project applicant shall contact the consulting tribe(s) with notification of the proposed grading and shall make a good-faith effort, as determined by the City's Planning Director, to enter into a Tribal Cultural Resources Treatment and Monitoring Agreement that determines its tribal cultural resources may be present on the site. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the handling of tribal cultural resources; project grading and development scheduling; terms of compensation for the Tribal monitors; treatment and final disposition of any tribal cultural resources, including but not limited to sacred sites, burial goods and human remains, discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. The terms of the agreement shall not conflict with any of these mitigation measures. A copy of the agreement shall be provided to the City of Norco Planning Department prior to the issuance of a grading permit.

TCR-2 Tribal Cultural Resources – Archaeological Monitoring

At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities on the site take place, the project applicant shall retain a Secretary of Interior Standards-qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Ground-disturbing activities may include, but are not limited to, pavement removal, grading, excavation, drilling, and trenching. The on-site monitoring would end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. The Project Archaeologist, in consultation with interested Tribes identified in Mitigation Measure TCR-1, and the project applicant, shall develop an Archaeological Monitoring Plan to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the Plan shall include:

1. Project grading and development scheduling.
2. The development of a rotating or simultaneous schedule in coordination with the project applicant and the Project Archeologist for designated Native American Tribal Monitors from the consulting Tribes during grading, excavation and ground-disturbing activities on the site.
3. The safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all Project Archaeologists.
4. The protocols and stipulations that the project applicant, Tribes and Project Archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

TCR-3 Treatment and Disposition of Tribal Cultural Resources

If tribal cultural resources are inadvertently discovered during ground-disturbing activities for the project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. **Temporary Curation and Storage.** During project construction, all discovered resources shall be temporarily curated in a secure location on the site or at the offices of the Project Archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried by the Project Archeologist with tribal monitor oversite of the process.
2. **Treatment and Final Disposition.** The project applicant shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The project applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Norco Planning Department with documentation of same:
    a. **Reburial On The Site.** Accommodate the process for on-site reburial of the discovered items with the consulting Tribes. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.
    b. **Curation.** A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards pursuant to 36 CFR Part 79, and therefore, would be professionally curated and made available to other archaeologists or researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.
    c. **Disposition Dispute.** If more than one Tribe is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center.
    d. **Final Report.** At the completion of grading, excavation and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the Project Archaeologist and Tribal Monitors within 60 days of completion of grading. This report shall:
        i. Document the impacts to the known resources on the property;
        ii. Describe how each mitigation measure was fulfilled;
        iii. Document the type of cultural resources recovered and the disposition of such resources;
        iv. Provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting;
        v. In a confidential appendix, include the daily/weekly monitoring notes from the archaeologist; and
        vi. All reports produced will be submitted to the City of Norco, Eastern Information Center and consulting tribes.

Significance After Mitigation

Implementation of Mitigation Measures CR-1, CR-2, TCR-1, TCR-2, and TCR-3 would reduce potential impacts to tribal cultural resources to less than significant.

4.4.4 Cumulative Impacts

The planned and pending projects in the project site vicinity are listed in Table 3-1 of Section 3, *Environmental Setting*. Cumulative projects considered in this analysis include residential, warehouse, commercial, hotel, school, and recreational land uses. The project, in conjunction with other planned and pending projects in the project site vicinity, would cumulatively increase the potential to encounter sensitive cultural, archaeological, and tribal cultural resources and human remains. In the event that cultural, archaeological, tribal cultural resources, and/or human remains are discovered, each individual project would be required to comply with the applicable regulatory requirements and mitigate any potential impacts to resources on the individual project site.

Potential impacts of the project would be reduced to a less-than-significant level due to implementation of Mitigation Measures CUL-1, CUL-2, TCR-1, TCR-2, and TCR-3 that would protect cultural, archaeological, and tribal cultural resources and human remains. Compliance with CEQA requirements, including the implementation of recommendations provided in project-specific cultural resource studies, on all new development would ensure that the project would not be cumulatively significant. In the event that tribal cultural resources are discovered, each individual project would be required to comply with the applicable regulatory requirements and the consultation requirements of AB 52 to determine and mitigate any potential impacts to tribal cultural resources. Such recommendations may include site avoidance, in-situ preservation, site salvage and documentation, and/or other measures determined to be necessary based on the resources identified. Therefore, cumulative impacts to cultural and tribal cultural resources would be less than significant.

4.5 Energy

This section analyzes the project's potential impacts on energy. To assure project decisions consider energy implications, CEQA requires EIR to include a discussion of the potential energy impacts of proposed projects, with emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The analysis contains a description of energy sources for the project site and vicinity, a listing of federal and State regulations pertaining to energy production and consumption, and a discussion of potential impacts the project.

The analysis is based on the Air Quality and Greenhouse Gas Emissions Study prepared by Rincon Consultants, Inc. (2020) which is included as Appendix C, and the Traffic Impact Analysis (TIA) prepared for the project by Urban Crossroads (2020) which is included as Appendix L. Air quality impacts are further discussed in Section 4.2, *Air Quality*, greenhouse gas (GHG) and climate change impacts are further discussed in Section 4.5, *Greenhouse Gas Emissions*, and traffic impacts are further discussed in Section 4.11, *Transportation and Traffic*.

4.5.1 Setting

Energy use can affect air quality and other natural resources adversely. Energy is primarily categorized in three areas: electricity, used in buildings and cities for lighting and other services; natural gas used for building heating, cooking, and other industrial processes; and fuels used for transportation. Fossil fuels used for any of these types of energy must be burned to create electricity that powers homes and commercial/industrial buildings, to create heat, and to power vehicles. The burning or combusting of fuels releases pollutants and GHG emissions. Many factors affect the level of impact from fuels. When used in transportation, the impact from energy corresponds to the fuel efficiency of cars, trucks, and public transportation; the mode of travel, such as auto, carpool, and public transit; and miles traveled by these modes as well as the type of fuel. Construction and routine operation and maintenance of transportation infrastructure also consume energy as do residential, commercial, and industrial land uses. This typically occurs through the use of natural gas for heating, cooking, and industrial processes along with the use of electricity.

Energy Production

The two largest sources of energy produced in California in 2017 were renewable energy sources, at approximately 1,085.5 trillion British thermal units (Btu), and crude oil, at approximately 996.4 trillion Btu. Other sources of energy produced in California include nuclear electric power, natural gas, and biofuels (United States Energy Information Administration [USEIA] 2018a). Crude oil was used as transportation fuel primarily, with a portion used in industrial processes. In this analysis, renewable energy sources include geothermal, solar, wind, biomass, and hydroelectric energy generation. In 2018, about 34 percent of the electricity used to serve California was produced from renewable resources (California Energy Commission [CEC] 2019a).

In 2017, solar photovoltaic (PV) and solar thermal installations provided about 16 percent of California's net electricity generation. California ranked second in the nation in conventional hydroelectric generation and first as a producer of electricity from solar, geothermal, and biomass resources. California's total energy consumption is second-highest in the nation, but, in 2017, the State's per capita energy consumption ranked 48th, due in part to its mild climate and its energy efficiency programs (USEIA 2018b).

Electricity

In 2018, California used 285,488 gigawatt-hours (GWh) of electricity, of which 31 percent were from renewable resources. In recent years, electricity demand has been flat or slightly declining as energy efficiency programs have resulted in end-use energy savings and as customers install behind-the-meter (BTM) residential solar PV systems that directly displaces utility-supplied generation. In 2018, BTM residential solar generation was estimated to be 13,582 GWh, a 20 percent increase from 2017. The strong growth in residential solar has had a measurable impact on utility served load and, consequently, on the total system electric generation summary (CEC 2019b).

Southern California Edison (SCE) would provide electricity to the project. Table 4.5-1 shows the electricity and natural gas consumption by sector and total for SCE.

Table 4.5-1 Electricity Consumption in 2018 for the SCE Service Area

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
3,192.2	31,573.8	4,367.4	13,391.6	2,390.0	29,865.0	496.0	85,276.0

Notes: Usage expressed in GWh

Source: CEC 2019c

SCE's energy sources include renewable power sources, large hydroelectric, natural gas, nuclear, and unspecified sources of power (electricity from transfers that are not traceable to specific generation sources). SCE's "Green Rate" program provides an option for customers to offset half or all of their energy usage by paying into a fund for solar energy sources. Table 4.5-2 shows the 2018 energy sources for SCE compared to California as a whole.

Table 4.5-2 2018 SCE and California Energy Sources

Energy Sources	Percent of Power Sources			
	SCE Power Mix	SCE Green Rate 50% Option	SCE Green Rate 100% Option	California Power Mix
Biomass and Biowaste	1	0	0	2
Geothermal	8	4	0	5
Small Hydroelectric	1	0	0	2
Solar	13	57	100	11
Wind	13	7	0	11
Renewable Energy Sources Total	**36**	**68**	**100**	**31**
Coal	0	0	0	3
Large Hydroelectric	4	2	0	11
Natural Gas	17	8	0	35
Nuclear	6	3	0	9
Other	0	0	0	<1
Unspecified Sources[1]	37	18	0	11
Total Power	**100**	**100**	**100**	**100**

[1]Electricity from transfers that are not traceable to specific generation sources.

Source: CEC 2019c

Natural Gas

California consumed approximately 12,640 million U.S. therms (MMthm) of natural gas in 2018 (CEC 2019e). The project site would be provided natural gas by Southern California Gas Company (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California and provides natural gas for residential, commercial, and industrial markets, as well as for electric generation (California Gas and Electric Utilities 2018).

Table 4.5-3 shows the natural gas consumption by sector and total for SoCalGas. In 2018, SoCalGas provided approximately 41 percent of the total natural gas usage in California, with approximately 42 percent consumed for residential use and 58 percent for industrial, commercial, and other uses. Specifically, Riverside County consumed approximately 398.5 MMthm of natural gas in 2018, with approximately 65 percent consumed for residential use and 35 percent for non-residential use (CEC 2019c).

Table 4.5-3 Natural Gas Consumption in 2018 for SoCalGas Service Area

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
77.6	913.0	74.5	1,714.4	229.2	2,147.4	5,156.1

Notes: Usage expressed in MMThm

Source: CEC 2019e

Petroleum

In 2018, approximately 28 percent of the State's energy consumption was used for transportation activities.[1] Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, which would result in a 20 to 22 percent reduction. This decline comes in response to both increasing use of electric vehicles (EVs) and higher fuel economy for new gasoline vehicles (CEC 2018b). California consumed 576.9 trillion Btu of petroleum energy in 2017, approximately 15.7 percent of total energy consumed in the State (USEIA 2018c).

Alternative Vehicle Fuels

Various statewide regulations and plans encourage alternative fuel use to reduce GHG emissions and criteria pollutant emissions. These include the Low Carbon Fuel Standard and Senate Bill (SB) 32, as well as a myriad of other statewide and local air district regulations. Conventional gasoline and diesel may be replaced with different alternative fuels, depending on the capability of the vehicle. The most common alternative fuel vehicles are electric and electric-hybrid vehicles, but other types include biodiesel, hydrogen, and natural gas. Descriptions of the most widely used alternative fuels include the following.

- Hydrogen is being explored for use in combustion engines and fuel cell EVs. The interest in hydrogen as an alternative transportation fuel stems from its clean-burning qualities, its potential for domestic production, and the fuel cell vehicle's potential for high efficiency: hydrogen is two to three times more efficient than gasoline. Currently, California has 34 hydrogen refueling stations. The nearest hydrogen refueling station to the project site is at 1850 E. Holt Boulevard in Ontario (approximately 14 miles northwest from the project site), which is offline and not operational (U.S. Department of Energy [DOE] 2019). Fuel cells are being explored as a way to use electricity generated on-board the vehicle to power electric motors.
- Biodiesel is a renewable alternative fuel that can be manufactured from vegetable oils, animal fats, or recycled restaurant grease. Biodiesel is biodegradable and cleaner-burning than petroleum-based diesel fuel. Generally, biodiesel can run in any diesel engine without alterations, but fueling stations have been slow to make it available. There are ten biodiesel refueling stations in California and the closest one to the project site is Downs Energy at 1296 Magnolia Avenue in Corona, approximately 4.5 miles south from the project site (DOE 2019).
- Electricity can power electric and plug-in hybrid EVs directly from the power grid. Generally, these vehicles draw from the electricity grid and store the energy in their batteries. The nearest EV charging station is at the SilverLakes Park, which is located at 5555 Hamner Avenue in Norco, approximately 2.5 miles north from the project site.
- Natural Gas is considered an alternative fuel and is currently being used in vehicles in two forms: compressed natural gas and liquefied natural gas. Compressed natural gas is used in light-, medium-, and heavy-duty vehicles and achieves similar fuel economy as traditional diesel or gasoline fuels. Liquefied natural gas is costly to produce and therefore is used in limited applications, typically in medium- and heavy-duty vehicles (USEIA 2018d). The closest liquified natural gas station is located at 1735 S Turner Avenue in Ontario, approximately 11 miles north

[1] United States Energy Information Administration (EIA). 2019. Monthly Energy Review, July. Table 2.5, Transportation Sector Energy Consumption. Available at: https://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf (accessed August 2019).

from the project site. The closest compressed natural gas station is at 11888 Mission Boulevard in Jurupa Valley, approximately 8 miles north from the project site (DOE 2019).

4.5.2 Regulatory Setting

a. Federal

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy (CAFE) standards are federal rules established by the National Highway Traffic Safety Administration (NHTSA) that set fuel economy and GHG emissions standards for new passenger cars and light trucks sold in the United States. The CAFE standards become more stringent each year, reaching an estimated 38.3 miles per gallon (mpg) for the combined industry-wide fleet for model year 2020 (77 Federal Register 62624 et seq. [October 15, 2012 Table I-1]). It is, however, legally infeasible for individual municipalities to adopt more stringent fuel efficiency standards. The Clean Air Act (42 United States Code [USC] Section 7543[a]) states that "no state or any political subdivision therefore shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part." In August 2016, the United States Environmental Protection Agency (USEPA) and NHTSA announced the adoption of the phase two programs related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi- trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower carbon dioxide (CO_2) emissions by approximately 1.1 billion metric tons (MT) of CO_2 and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the NHTSA, a part of the U.S. Department of Transportation, for establishing and regularly updating vehicle standards. The USEPA administers the CAFE program, which determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 mpg for the 1975 model year to 30.7 mpg for the 2014 model year and is expected to increase to 54.5 mpg by 2025.

Energy Star Program

In 1992, the USEPA introduced Energy Star as a voluntary labeling program to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components, such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specification for maximum energy use established under the program are certified to display the Energy Star label. In 1996, the USEPA joined with the Energy Department to expand the program, which now includes qualifying commercial and industrial buildings as well as homes.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 was designed to improve vehicle fuel economy and help reduce nationwide dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting global climate change. Specifically, it increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard by requiring fuel producers to use at least 36 billion gallons of biofuel in 2022 and reduces U.S. demand for oil by setting a national fuel economy standard of 35 mpg by 2020.

b. State

California Energy Action Plan

The CEC, in collaboration with California Public Utilities Commission (CPUC), is responsible for preparing the California Energy Action Plan (EAP), which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The 2003 California EAP 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 addressing their infrastructure needs; and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In the October 2005 EAP II, the CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as information on the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change. In 2008, the CEC determined an update to the plan was not needed due to State regulations such as Assembly Bill (AB) 32.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), the CEC and California Air Resources Board (CARB) prepared and adopted a joint-agency report, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One performance-based goal for AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

Integrated Energy Policy Report

SB 1389 (Chapter 568, Statutes of 2002) required the CEC to conduct assessments and forecasts of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The CEC uses these assessments and forecasts to develop energy policies and recommendations to conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

Senate Bill X1-2: California Renewable Energy Resources Act

In 2011, the Governor signed SB X1-2, which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 33 percent of their electricity supply from renewable sources by 2020. The CPUC and CEC implement the statewide Renewables Portfolio Standard (RPS) program through rulemakings and monitoring the activities of electric energy utilities in the State.

Senate Bill 1078: California Renewables Portfolio Standard Program

SB 1078 (Chapter 516, Statutes of 2002), and as expanded under SB X1-2, establishes RPS for electricity supply. The initial RPS program only required electrical corporations to provide 20 percent of their supply from renewable sources by increasing its total procurement at least one percent each year to reach the 20 percent goal. SB X1-2 expanded this law by making it applicable to retail sellers of electricity and required procurement from eligible renewable energy resources to 33 percent by 2020.

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's RPS Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.

Assembly Bill 1493: Reduction of Greenhouse Gas Emissions

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley Bill, amended Health and Safety Code Section 42823 and added Section 43018.5 requiring CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a State plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other federal, State, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan, Executive Order S-06-06

Executive Order (EO) S-06-06, April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs State agencies to work together to advance biomass programs in California, while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the State to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
- Create jobs and stimulate economic development, especially in rural regions of the State
- Reduce fire danger, improve air and water quality, and reduce waste

Title 24, California Code of Regulations

California Code of Regulations (CCR), Title 24, Part 6, is California's Energy Efficiency Standards for Residential and Non-residential Buildings. The CEC established Title 24 in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. The standards are updated on an approximately three-year cycle to allow consideration and possible incorporation of new efficient technologies and methods.

In 2016, the CEC updated Title 24 standards with more stringent requirements effective January 1, 2017. The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided these standards exceed those provided in Title 24.

The 2019 update to the Building Energy Efficiency Standards under Title 24 applies to buildings for which an application for a building permit is submitted on or after January 1, 2020. In nonresidential buildings, the standards mainly update indoor and outdoor lighting and use of light emitting diode (LED) technology as well as HVAC ventilation and filtration requirements (CEC 2018a).

California Green Building Standards Code (2016), CCR Title 24, Part 11

The California Green Building Standards Code, commonly referred to as "CALGreen" was brought into effect on August 1, 2009 to outline architectural design and engineering principles that are in synergy with environmental resources and public welfare. CALGreen sets minimum standards for buildings, and since 2016, applies to new building construction and some alterations/additions within certain parameters.

The 2016 version of CALGreen laid out the minimum requirements for newly constructed residential and nonresidential buildings to reduce GHG emissions through improved efficiency and process improvements. It also includes voluntary tiers to encourage building practices that improve public

health, safety, and general welfare by promoting a more sustainable design. If the project is submitted for building plan check on January 1, 2020 or after, the 2019 code cycle will be effective. The 2019 update includes new requirements for construction and sustainable design, and inclusion of future EV charging stations, landscaping and irrigation such as shade trees, and air filtration systems (CALGreen Energy Systems 2019).

California Air Resources Board

CARB has a number of regulations and standards that seek to limit emissions from mobile sources and pollution from specific types of operation or source pollution. These policies indirectly impact energy consumption. These include:

- In-Use Off-Road Diesel Rule: Imposes limits on idling, restricts the addition of older vehicles, and requires the retirement or replacement of older engines depending on their fleet size category.
- Phase 1 Medium- and Heavy-Duty Engine and Vehicle GHG Emission Standards: establishes standards for new medium- and heavy-duty engines and vehicles sold in California.
- Advanced Clean Cars Plan: Coordinates regulating smog-causing pollutants and GHG emissions through developing more stringent emissions standards for vehicles and improving the number of zero-emission vehicles on the roadways.
- Airborne Toxic Control Measure (ACTM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling: prohibits idling of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and trucks, for more than five minutes at any location.

c. Local

Western Riverside Energy Partnership

The Western Riverside Energy Partnership (WREP) is a local government partnership between SCE, SoCalGas, and 14 jurisdictions in the Western Riverside Council of Governments (WRCOG) subregion, designed to achieve energy savings, reduce utility bills, and enhance the level of comfort in municipal, commercial, and residential buildings. The WREP promotes energy efficiency by increasing community awareness and participation in energy efficiency, demand response, and self-generation programs. WREP assists businesses in addressing the specific challenges of reducing energy usage, lowering utility bills, cutting GHG emissions, and educating tenants, management, and facility operations personnel.

City of Norco General Plan

The City of Norco General Plan Conservation Element contains goals and policies for Norco to achieve its vision for energy efficiency (City of Norco 2014). General Plan Conservation Element Chapter 2.5 identifies various goals and policies intended to encourage energy efficiency in the City. The following policies in the General Plan Conservation Element are relevant to the project:

- **Policy 2.5.1a:** Encourage new construction and project design that uses, or takes advantage of renewable energy resources, including but not limited to solar energy design.
- **Policy 2.5.1b:** Provided updated energy information documents for builders as needed to reflect the most recent Title 24 energy efficiency requirement and standards and other applicable new laws, requirements, and feasible building standards as may be available.

- **Policy 2.5.1c:** Update requirements and policies as necessary to reflect the most cost-effective advances in energy production and conservation.
- **Policy 2.5.2f:** Support alternative modes of transportation as feasible including the equestrian trail system, public transportation, bicycles, etc. to reduce the demand on non-renewable energy resources.
- **Policy 2.9.15:** In addition to compliance with the California Green Building Code requirements, encourage innovation in residential and non-residential design to further minimize ultimate consumption of energy and water resources including the development of green roofs.

4.5.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states the energy impacts of the project are considered significant if the project would:

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

b. Methodology

The project's construction and operational energy usage were calculated based on California Emissions Estimator Model (CalEEMod) outputs (Appendix C), which were also used to calculate the project's air quality and GHG emissions. (Project air quality and GHG emissions impacts are discussed in detail in Section 4.2, *Air Quality* and Section 4.7, *Greenhouse Gas*, respectively.) CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g. Apartments Mid Rise, City Park, Fast Food Restaurant w/o Drive Thru, Health Club, Hotel, and Parking Lot), and location, to estimate a project's construction and operational energy consumption. Consumption factors were drawn from CalEEMod for project natural gas and electricity consumption.

Construction energy demand considers diesel fuel consumption associated with operation of construction equipment and vendor/hauling truck trips, as well as gasoline fuel consumption associated with worker trips to and from construction sites. Energy demand for off-road construction equipment is based on anticipated equipment, usage hours, horsepower, load factors, and construction phase duration provided by the CalEEMod output, as well as *Exhaust and Crankcase Emission Factors for Nonroad Compression Ignition Engines* (USEPA 2018). Hauling, vendor, and worker trip fuel consumption considers anticipated daily trips, default trip lengths, and average fuel efficiency values obtained from the Bureau of Transportation Statistics [U.S. Department of Transportation (DOT) 2018].

Operational energy demand considers transportation-based fuel consumption as well as electricity and natural gas consumption associated with the project. Transportation-based fuel consumption is based on VMT generated by project operation and fleet mix obtained from CalEEMod outputs. Electricity and natural gas consumption were also based on CalEEMod outputs and compared to existing consumption in the SCE and SoCalGas service areas.

c. Project Impacts and Mitigation Measures

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

Impact E-1 THE PROJECT WOULD CONSUME ELECTRICITY, NATURAL GAS, AND FUEL DURING CONSTRUCTION AND OPERATION. HOWEVER, THE PROJECT WOULD NOT CONTRIBUTE A SIGNIFICANT ADDITIONAL DEMAND ON SCE OR SOCALGAS AND WOULD COMPLY WITH APPLICABLE CONSERVATION STANDARDS. NEITHER PROJECT CONSTRUCTION NOR OPERATION WOULD RESULT IN WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The manufacturing of construction materials would also involve energy use. Due to the large number of materials and manufacturers involved in the production of construction materials, including manufacturers in other states and countries, upstream energy use cannot be estimated reasonably or accurately. However, it is reasonable to assume that manufacturers of building materials such as concrete, steel, lumber, or other building materials would employ energy conservation practices in the interest of minimizing the cost of doing business. Consistent with CEQA Guidelines Section 15145, this analysis does not evaluate upstream energy use as it is too speculative.

The project would require site preparation and grading; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping. Construction would be typical for the region and building types. The total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod outputs (Appendix C). Worker trips to and from the project site are assumed to use gasoline fuel from passenger cars and light/medium trucks.

Table 4.5-4 presents the estimated construction phase energy consumption, indicating construction equipment, vendor trips, and worker trips would consume approximately 400,610 gallons of fuel over the project construction period. Construction equipment would consume approximately 205,174 gallons of diesel fuel; vendor/haul trips would consume approximately 50,053.9 gallons of diesel fuel; and worker trips would consume approximately 145,382 gallons of gasoline fuel over the project's construction period of 11 months. According to the California Annual Retail Fuel Outlet Report Results, retail diesel sales in Riverside County totaled approximately 132 million gallons, while retail gasoline sales totaled approximately 1.05 billion gallons in 2018 (CEC 2019a). Therefore, fuel consumption associated with project construction would account for approximately 0.17 percent of annual retail diesel sales and approximately 0.014 percent of annual retail gasoline sales in Riverside County. Therefore, energy consumption from project construction would not represent a wasteful or inefficient use of energy resources.

Table 4.5-4 Estimated Fuel Consumption During Construction

Fuel Type[1]	Gallons of Fuel	MMBtu[2]
Diesel Fuel (Construction Equipment)[1]	205,174	126,151
Diesel Fuel (Vendor/Haul Trips)[2]	50,054	6,380
Other Petroleum Fuel (Worker Trips)[3]	145,382	15,320
Total	**400,610**	**47,041**

Notes: Totals may not add up precisely due to rounding.

[1]Fuel demand rates for construction equipment, hauling and vendor trips, and worker trips are derived from CalEEMod outputs of the Air Quality and GHG Emissions Study (Appendix C), fuel consumptions factors for construction vehicle engines (USEPA 2018), and fuel consumption data from the (DOT 2018). See Appendix C for calculations and analysis.

[2]CaRFG CA-GREET 3.0 fuel specification of 109,772 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above. Low-sulfur Diesel CA-GREET 3.0 fuel specification of 127,460 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (CARB 2018a).

Similar to the manufacturers utilizing energy conservation methods to reduce costs, it is reasonable to assume contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. The project would comply with the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation, which imposes limits on idling and restricts the use of older vehicles. This would reduce fuel consumption and lead to the use of fuel-efficient vehicles on the construction site. Construction equipment would be maintained to applicable standards, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. Therefore, the project would not result in the inefficient, wasteful, and unnecessary use of energy during construction, and project construction impacts related to energy consumption would be less than significant.

Operational Energy Demand

Project operation would increase area energy demand from greater electricity, natural gas, and diesel/gasoline consumption at the site, which is mostly vacant with exception to the RV sales lot in the northeast corner of the site. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, and water use. Diesel and gasoline consumption would be attributed to the employees accessing the site, truck deliveries to and from the site, and vehicles used for on-site goods movement.

The project incorporates the following design features to promote energy efficiency and sustainability:

- Project buildings would be designed to support solar PV panel systems on the rooftops. Installation of the PV system would be determined by the property owner.
- On site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) would be powered by non-diesel fueled engines. Non-diesel gasoline uses less energy than diesel fuel (see Table 4.5-7, footnote number 6).
- The project would include drought-tolerant landscaping, water-efficient irrigation techniques, and high-efficiency toilets and other appliances that would reduce energy use associated with water demand management, pursuant to CALGreen requirements.

Table 4.5-5 shows the estimated electricity usage per year based on the land use type. Electricity consumption is based on CalEEMod outputs from the air quality analysis. The outputs include Title 24 standards for the various land uses of the project and are baseline values determined through CEC surveys and studies.

Table 4.5-5 Project Anticipated Electricity Consumption per Year

Land Use	Total Estimated Consumption (Kw hours/year)[1]
Apartments Mid Rise	1,461,670
City Park	0
Fast Food Restaurant w/o Drive Thru	380,799
Health Club	136,081
Hotel	1,134,000
Parking Lot	62,346
Total	**3,174,896**
Projected Solar Generation[2]	**864,190**

Note: See CalEEMod "Annual" output Table 5.3 *Energy Land Use* Unmitigated (Appendix C). CalEEMod does not show solar projection for only residential land use and it is currently unknown when solar panels will be installed; therefore, unmitigated is used while estimated consumption total for solar is shown accordingly.

[1]Title-24 Electricity Energy Intensity reduced by 30% for commercial use per 2019 Title 24 standards

[2] See CalEEMod Residential Solar PV Requirement Spreadsheet Calculation (Appendix C). Projected solar generation is amount of electricity generated (kWH/yr) for residential land use as mandated by Title 24 standards.

Source: Rincon Consultants, Inc. 2020 (Appendix C)

Operation of the project is estimated to consume approximately 3,174,896 KWh per year, or approximately 3.17 GWh per year. SCE would serve the project site, and the company provided 83,400 GWh to its service area in 2018. Furthermore, electricity consumption in Riverside County totaled approximately 15,981 GWh in 2018. Operation of the project would represent less than 0.001 percent of SCE's annual electricity demand and approximately 0.01 percent of annual electricity demand in Riverside County. Therefore, the project would not place a significant demand on SCE's electricity supply.

Natural gas would be consumed during project operation through uses including, but not limited to, space heating, water heating, and appliance use. Table 4.5-6 shows estimated natural gas consumption to operate the project, based on associated land uses and CalEEMod outputs (Appendix C).

Table 4.5-6 Project Anticipated Natural Gas Consumption per Year

Land Use	Total Estimated Consumption (BTUs/year)
Apartments Mid Rise	4,734,110,000
City Park	0
Fast Food Restaurant w/o Drive Thru	2,378,930,000
Health Club	406,125,000
Hotel	4,200,700,000
Parking Lot	0
Total	**11,719,865,000**

Source: Rincon Consultants, Inc. 2020 (Appendix C)

The project would consume an estimated 11.72 billion Btu (or approximately 0.12 MMThms) per year during operation. SoCalGas would provide natural gas to the project. The company distributed approximately 5,156 MMThms and 398.5 MMthms throughout its service area and in Riverside County, respectively (CEC 2019e). The project would consume less than 0.001 percent of SoCalGas' annual natural gas demand and approximately 0.003 percent of the total natural gas produced by SoCalGas for Riverside County in 2018. Therefore, the project would not place a significant demand on the company's natural gas supply.

Operation of the project would require energy use in the form of transportation fuel consumption, electricity, and natural gas. Transportation fuel consumption would occur due to vehicular travel by residents and guests traveling to and from the project site. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the project.

The project's estimated number of average daily trips from CalEEMod is used to determine the gasoline usage and calculate the energy consumption associated with project operation. According to the CalEEMod calculations, the project would result in 4,609,482 annual VMT (Appendix C). Table 4.5-7 shows the estimated total annual fuel consumption of the project using the estimated VMT with the assumed vehicle fleet mix (Appendix C).

Table 4.5-7 Estimated Project Transportation Energy Consumption

Vehicle Type[1]	Percent of Vehicle Trips[2]	Annual Vehicle Miles Traveled[3]	Average Fuel Economy (miles/gallon)[4]	Total Annual Fuel Consumption (gallons)	Total Fuel Consumption (MBtu)[6]
Passenger Cars	55.1	2,541,489	24.2	105,895	11,626
Light/Medium Trucks	36.1	1,663,516	17.4	95,604	10,496
Heavy Trucks/ Other	8.3	381,896	7.4	51,608	6,578
Motorcycles	0.5	22,582	43.9	514	56
Total		**4,609,482**		**253,622**	**28,756**

Notes: Totals may not add up precisely due to rounding.

[1] Vehicle classes provided in CalEEMod do not correspond exactly to vehicle classes in DOT fuel consumption data, except for motorcycles. Therefore, it was assumed that passenger cars correspond to the light-duty, short-base vehicle class, light/medium trucks correspond to the light-duty long-base vehicle class, and heavy trucks/other correspond to the single unit, 2-axle 6-tire or more class.

[2] Percent of vehicle trips from CalEEMod Annual Emissions Table 4.4 "Fleet Mix" (Appendix C)

[3] Mitigated annual VMT found in CalEEMod Annual Emissions Table 4.2 "Trip Summary Information" (Appendix C)

[4] Average Fuel Economy: USEIA 2019

[5] DOE 2018

[6] CaRFG fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for automobile vehicle classes and fuel specification of 127,464 Btu/gallon used for diesel conversion rate for heavy trucks (CARB 2018; Schremp 2017).

The project would consume approximately 253,622 gallons of fuel each year for transportation uses, or approximately 28,756 MBtu in transportation energy consumption per year, and it would use electricity and natural gas for the operation of the residential and commercial uses. The estimated electricity and natural gas use would not have a substantial effect on energy supplies or place significant demand on SCE or SoCalGas, which would serve the site. Furthermore, the project would be subject to applicable building codes at the time of construction, which are continuously evolving to include more energy-efficient requirements. Based on information provided by the project applicant, the project would also implement signage intended to reduce truck idling, require operators of the proposed facilities to encourage trucks to incorporate energy efficiency improvement features, and provide EV parking, to reduce operational energy demand.

Energy consumption associated with project construction would be temporary and typical of similar projects, and would not result in wasteful, inefficient, or unnecessary energy use. The operation of the project would increase the use of electricity, natural gas, and gasoline/diesel fuel from existing conditions on site. However, the increase would be typical of other residential and commercial projects; would not result in wasteful, inefficient, or unnecessary energy use; and existing energy providers would have sufficient supplies to serve the project. The project would comply with applicable regulations. Therefore, project operation would not result in wasteful or unnecessary energy consumption or conflict with existing energy standards and regulations. Project impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation measures.

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

Impact E-2 THE PROJECT WOULD INCORPORATE ENERGY- AND WATER-EFFICIENCY FEATURES INTO PROPOSED BUILDINGS, AND IMPLEMENTATION OF THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT STATE REGULATIONS OR GENERAL PLAN CONSERVATION ELEMENT POLICIES AIMED AT ENCOURAGING ENERGY EFFICIENCY. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

As discussed above in Section 4.5.2, *Regulatory Setting*, SB 100 mandates 100 percent clean electricity for California by 2045. Because the project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100 as existing service providers adjust their renewable energy supplies, and the project would not conflict with this statewide plan. Additionally, project buildings would be designed to support solar PV panel systems on the rooftops for potential clean energy produced on the project site. The buildings would also be subject to energy efficiency standards pursuant to CCR Title 24 requirements.

The General Plan Conservation Element contains policies targeting energy efficiency. As demonstrated in Table 4.5-8, the project would be consistent with applicable General Plan Conservation Element policies intended to encourage energy efficiency. As such, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and the project would have no impact.

Table 4.5-8 Project Consistency with Applicable General Plan Policies

Policies	Project Consistency
Conservation Element Goals and Policies	
Policy 2.5.1a: Encourage new construction and project design that uses, or takes advantage of renewable energy resources, including but not limited to solar energy design.	**Consistent.** Energy-efficient features of the project are described in Section 2, *Project Description*, and include non-demand hot water systems, LED lighting, and individual unit water-use monitoring. Therefore, the project would be consistent with Policy 2.5.1a.
Policy 2.5.2c: Work towards greater energy efficiency by minimizing dependence on energy from non-renewable resources, replacing it with energy from renewable resources	**Consistent.** The project buildings would be designed and constructed to be solar ready, to facilitate easy installation of solar PV infrastructure for solar power generation. Project buildings would be designed to implement energy conservation features and would include efficient HVAC systems pursuant to the most recent Title 24 standards. The project would also include EV charging parking spaces in the designated parking area, as described in Section 2, *Project Description*. Therefore, the project would be consistent with Policy 2.5.2c.
Policy 2.5.2f: Support alternative modes of transportation as feasible including the equestrian trail system, public transportation, bicycles, etc. to reduce the demand on non-renewable energy resources.	**Consistent.** The project would include bicycle parking spaces pursuant to City of Norco Municipal Code. As described in Section 2, *Project Description*, the project would include horse paddock and equestrian trail. The proposed equestrian trail would be along the project frontage of Hamner Avenue and Third Street, with trail connections to an existing equestrian trail on Third Street. The food garden and outdoor amenities combined with the equestrian trail and location of the project site would encourage guests, patrons, and residents to walk or horseback ride to the project site. Therefore, the project would be consistent with Policy 2.5.2f.
Policy 2.9.15: In addition to compliance with the California Green Building Code requirements, encourage innovation in residential and non-residential design to further minimize ultimate consumption of energy and water resources including the development of green roofs.	**Consistent.** The project would comply with all applicable CALGreen (Title 24) Building Codes pertaining to energy efficiency, which would be verified by the City during the building permitting process. Proposed landscaping would include the installation of watering systems designed to be water efficient. The project buildings would be designed and constructed to be solar ready, to facilitate easy installation of solar PV infrastructure for solar power generation. Buildings would be designed to implement energy conservation features, such as energy efficient lighting and HVAC systems, pursuant to the most recent Title 24 standards. The project would conform to City of Norco Municipal Code Section 120.05.050 requirements for outdoor lighting. Therefore, the project would be consistent with Policy 2.9.1.

Source: City of Norco 2014

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

The project would have no impact without mitigation measures.

4.5.4 Cumulative Impacts

Planned and pending projects in Norco and surrounding areas are listed in Table 3-1 in Section 3, *Environmental Setting*, and include residential, commercial, and industrial land uses. Each of the cumulative projects would increase the energy consumption and demand in the region. Energy consumption by the cumulative projects would be regulated by Energy Efficiency Standards in Title 24 of the California Building Code, which apply to new construction of both residential and non-residential buildings, and indirect energy reduction measures from GHG reduction policies. Homes built in 2020 and beyond will be highly efficient due to stringent statewide energy efficiency standards and include PV generation to meet the home's expected annual electric needs (CEC 2018a).

Norco and WRCOG have policies and programs for the City and region, respectively, aimed at reducing overall energy consumption in Norco and the region. Norco encourages energy efficient design in public and private development, pursuant to the goals and policies contained in the General Plan Conservation Element. The WRCOG participates in the Home Energy Renovation Opportunity financing program for residents to conduct energy-efficient home improvements and afford renewable energy products, and the WREP is designed to optimize opportunities to achieve energy savings, in municipal, commercial, and residential buildings (WRCOG 2014). SCE has programs for residences and businesses to reduce electricity consumption, including incentives for solar systems and EVs (SCE 2019a). SoCalGas provides rebates on energy efficient clothes washers, dishwashers, attic/wall insulation, natural gas storage water heaters and furnaces (SoCalGas 2019a; 2019b). Planned, pending, and reasonably foreseeable projects would be subject to these applicable policies, and ongoing implementation of the programs described above would continue to reduce energy demand associated with future projects.

Moreover, SCE customers consumed 29 percent of the State's electricity use and SoCalGas customers consumed 40 percent of the State's natural gas use. The cumulative projects in the area would consume a fraction of the energy supplies from SCE and SoCalGas, and would not substantially increase statewide energy demand. SoCalGas estimates natural gas demands to decrease at an annual average rate of approximately 0.74 percent from 2018 to 2035, and SCE aims to double the amount of carbon-free electricity in its supply by 80 percent (SCE 2019b). Therefore, SoCalGas and SCE would have adequate supplies and the cumulative projects would not place a significant demand on the suppliers. Therefore, the project would have a less than significant cumulative impact.

4.6 Geology and Soils

This section analyzes the project's potential impacts related to geology, soils, seismicity, and paleontological resources. The analysis contains a description of the geological and soil setting for the project site and surrounding area, a discussion of potential impacts the project would have, and any mitigation measures required to reduce impacts.

The analysis is based on the Geotechnical Evaluation prepared by GeoTek, Inc. and is included as Appendix G. The Geotechnical Evaluation is based on information compiled through research and review of available geological and geotechnical data; a field exploration survey conducted on October 15, 2019 which included exploratory borings and soil sample collections; analysis of laboratory test results of the collected samples; and review and evaluation of project site seismicity conditions.

4.6.1 Setting

a. Geology and Soils

Regional Setting

The project site is located in the Peninsular Ranges geomorphic province. The Peninsular Ranges province is one of the largest geomorphic units in western North America, located almost completely in the Perris Block extending from the point of contact with the Transverse Ranges geomorphic province, southerly to the tip of Baja California. This province varies in width from about 30 to 100 miles. The project site is located in an area geologically mapped to be underlain by older fan deposits along the granitic bedrock materials. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province. The Perris Block is a structurally stable, cohesive mass of crustal rocks (Appendix G).

The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Several major fault zones are found in this province. The Elsinore Fault zone and the San Jacinto Fault zone trend northwest-southeast and are found near the middle of the province. The San Andreas Fault zone borders the northeasterly margin of the province (Appendix G).

Soil and Geologic Conditions

Based on the field exploration conducted on October 15, 2019 as part of the Geotechnical Evaluation (Appendix G), the project site is underlain by old fan deposits and granitic bedrock though some areas of the site are most likely underlain by fill based on evidence of prior development and disturbance. Older fan deposits were encountered within the test borings to depths ranging from about 7 to 36 feet below existing grade. The older fan deposits consisted of stiff to hard sandy clay, sandy silt, and dense to very dense silty and clayey sand.

Surface Water and Groundwater

There were no surface water sources identified on the project site during field observations. Groundwater was encountered at a depth of about 27.5 feet below grade for one of the borings completed during field exploration activities, and not encountered within any of the other borings dilled on site (Appendix G). Based on a review of existing records of the depth to water, GeoTek

estimates a historic high groundwater depth of 25 feet at the site with possible seasonal fluctuations in groundwater depth.

Faults and Groundshaking

The geologic structure of the entire southern California area is dominated mainly by northwest-trending faults associated with the San Andreas system. The project site is in a seismically active region. No active or potentially active fault is known to exist at the project site nor is the site situated within an "Alquist-Priolo" Earthquake Fault Zone. The subject property is not located within a State of California Seismic Hazard Zone for earthquake induced landsliding. The nearest zoned fault is the Elsinore Fault, located approximately 25.7 miles to the southwest (Appendix G).

Liquefaction and Other Seismic Hazards

Liquefaction occurs when vibrations or water pressure within a mass of soil cause the soil particles to lose contact with one another. As a result, the soil behaves like a liquid, loses the ability to support weight, and can flow down gentle slopes. This condition is usually temporary and is often caused by an earthquake vibrating water-saturated fill or unconsolidated soil. Soils that are susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Clayey (cohesive) soils or soils which possess clay particles in excess of 20 percent are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table. Lateral spreading refers to the spreading of soils in a rapid fluid-like flow movement similar to water.

Based on the high liquefaction potential designated by Riverside County, a liquefaction analysis was completed to assess the liquefaction potential of the project site soils during a seismic event. The results of the liquefaction analysis indicate that project site soils are not susceptible to liquefaction during a seismic event. The soils above groundwater are subject to minor dry settlement (0.15 inch); however, the magnitude of dry settlement is considered to be minimal and is not a design constraint for the project site (Appendix G).

Evidence of landslides or slope instabilities at the project site were not observed during the field exploration. The potential for secondary seismic hazards such as a seiche or tsunami is considered negligible for the project site due to site elevation and distance to an open body of water. Subsidence on the order of up to 0.1 foot may be anticipated resulting from preparation of the underlying soils for alluvial areas on site (Appendix G).

Expansive Soils

Expansive soils are soils containing water-absorbing minerals that expand as they take in water. Such expansive soil conditions can damage buildings due to the force they exert as they expand. Expansive soils generally contain certain types of clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experience a higher frequency of problems from expansive soils than areas with higher rainfall and more constant soil moisture.

Like most of the southern California region, the project site is in a semiarid region with marked seasonal changes in precipitation: most rain falls in winter, and there is a long dry season in summer and autumn. Therefore, the City's climate is such that a relatively high incidence of soil expansion is expected where soils contain the requisite clay minerals.

As stated above, the soils on the project site consist of stiff to hard sandy clay, sandy silt, and dense to very dense silty and clayey sand. Soil expansion index testing was completed on soil boring samples to evaluate the soil expansion potential of the project site soils. According to the results of the laboratory testing performed on two samples of the near surface alluvium, the near surface soils have a “very low” to “low” expansion potential. Bore samples determined that the underlain bedrock is very dense fine to coarse sand (Appendix G).

b. Paleontological Resources

Paleontological resources (fossils) are the remains and/or traces of prehistoric life. Fossils are typically preserved in layered sedimentary rocks and the distribution of fossils is a result of the sedimentary history of the geologic units within which they occur. Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. Although it is not possible to determine whether a fossil will occur in any specific location, it is possible to evaluate the potential for geologic units to contain scientifically significant paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they do occur during construction.

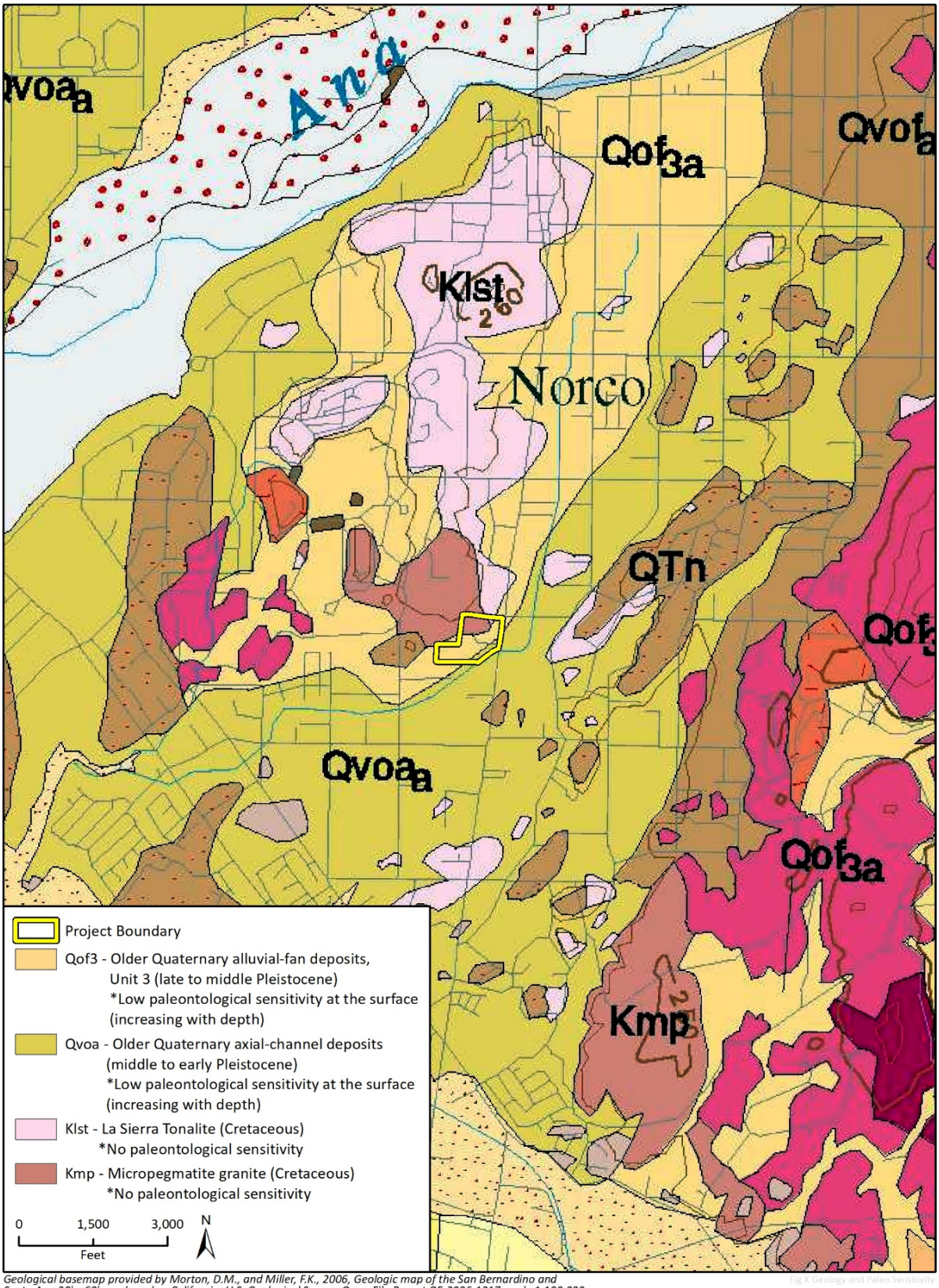
The project site is located within the central Perris Block within the northern portion of the Peninsular Ranges Province, one of eleven major geomorphic provinces in California (California Geological Survey 2002). A geomorphic province is a region of unique topography and geology that is readily distinguished from other regions based on its landforms and diastrophic history (Norris and Webb 1990). The Perris Block is a roughly rectangular area of relatively low relief that has remained relatively stable and undeformed during the Neogene (Norris and Webb 1990; Morton and Miller 2006). It is bound by the Cucamonga Fault Zone to the north, the San Jacinto Mountains to the east, the Elsinore Fault Zone to the southwest, and the Chino Basin to the west. According to Morton and Miller (2006) the Perris Block is underlain by lithologically diverse prebatholithic metasedimentary rocks intruded by Cretaceous plutons of the Peninsular Ranges Batholith, which are subsequently overlain by thin to relatively thick, discontinuous sections of nonmarine Quaternary sediments. Quaternary deposits within the Perris Block consist of Pleistocene and Holocene alluvial fan deposits emanating from the nearby San Gabriel Mountains to the north and fluvial deposits from the Santa Ana River, which bisects the Perris Block and flows southward (Norris and Webb 1990; Morton and Miller 2006).

The project site includes four geologic units mapped at ground surface by Morton and Miller (2006): (1) Quaternary old (late to middle Pleistocene) alluvial-fan deposits, Unit 3 (Qof3); (2) Quaternary old (middle to early Pleistocene) axial-channel deposits (Qvoa); (3) Cretaceous plutonic La Sierra Tonalite (Klst); and (4) Cretaceous plutonic micropegmatite granite (Kmp). Figure 4.6-1 shows the geologic units and paleontological sensitivity on the project site.

Quaternary old alluvial fan deposits: Quaternary old (late to middle Pleistocene) alluvial fan deposits (Qof3), which are mapped extensively throughout the project site, consist of well consolidated, crudely stratified, light yellowish-brown, texturally massive to faintly laminated, poorly sorted, fine- to very coarse-grained sand with sparsely distributed pebble beds (Morton and Miller 2006).

Quaternary old axial-channel deposits: Quaternary old (middle to early Pleistocene) axial-channel deposits (Qvoa), mapped in the southeast portion of the project site, consist of unconsolidated, poorly sorted clay, silt, sand, and gravel deposited in stream channels, flood basins, and slopes.

Figure 4.6-1 Geologic Units and Paleontological Sensitivity in the Project Site



Geological basemap provided by Morton, D.M., and Miller, F.K., 2006, Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: U.S. Geological Survey, Open-File Report OF-2006-1217, scale 1:100,000

Fig X Geology and Paleo Sensitivity

Pleistocene alluvial and fluvial deposits (Qof3, Qvoa) underlying the project site are old enough to preserve fossil resources. In particular, fine-grained alluvial deposits are generally deposited under conditions that are conducive to fossil preservation. However, coarse-grained alluvial deposits are deposited in high energy conditions that tend to destroy and disperse organic material, and as such, are not conducive to fossil preservation. Quaternary old (early Holocene to Pleistocene) fine-grained alluvial deposits have a well-documented record of abundant and diverse vertebrate fauna recorded throughout California (Paleobiology Database 2020; UCMP 2020). Jefferson (1985, 2010) has noted numerous vertebrate fossil taxa from Riverside County including horse, tapir, bison, camelid, deer, mastodon, mammoth, ground sloth, canine, rabbit, and rodent. Pleistocene-age fine-grained alluvial deposits have a high paleontological sensitivity, whereas Pleistocene-age coarse-grained alluvial deposits in the project site have a low paleontological sensitivity based on Society for Vertebrate Paleontology (SVP) guidelines (SVP 2010).

Cretaceous plutonic rocks: Cretaceous plutonic rocks of the Peninsular Ranges mapped within the northern project site (i.e., Klst, Kmp) consist of medium-grained holocrystalline igneous rocks, which are composed mostly of quartz diorite to granodiorite, and formed either from the cooling of molten rock deep below the surface under high heat and high pressure, or from cooling magma injected into older rocks. La Sierra Tonalite (Klst) consists of moderately dark-colored, massive biotite tonalite and is mostly altered to secondary minerals; including epidote, quartz, chlorite, and tourmaline. Cretaceous plutonic rocks of the Peninsular Ranges, including La Sierra Tonalite (Klst) and micropegmatite granite (Kmp), formed from the cooling of molten rock that was subsequently metamorphosed. The high-heat and high-pressure conditions in which these rocks formed are not suitable for life or fossilization. Therefore, Cretaceous plutonic rocks of the Peninsular Ranges have no paleontological sensitivity (SVP 2020).

A search of the paleontological locality records at the Natural History Museum of Los Angeles County resulted in no previously recorded fossil localities within the project boundary; however, at least three vertebrate localities (LACM 1207, 7811, and 8062) were identified within Quaternary old alluvial deposits in the general vicinity of the project. The closest vertebrate locality, LACM 1207, produced a fossil specimen of deer (*Odocoileus)* approximately two miles south-southwest of the project site on the northwestern side of Corona. LACM 7811, located approximately five miles north-northwest of the project in the Jurupa Valley, yielded a fossil specimen of whipsnake (*Masticophis*) at a depth of 9 to 11 feet below ground surface. Further north-northeast of LACM 7811 (west of Mira Loma), LACM 8062 rendered fossil specimens of bear (*Ursus*), dire wolf (*Canis dirus*), horse (*Equus*), camel (*Camelops*), bison (*Bison*), and elephant (Proboscidea) at a shallow, but unstated depth (McLeod 2020).

A supplemental review of the museum records maintained in the University of California Museum of Paleontology (UCMP) online collections database did not indicate any vertebrate fossil localities in the immediate vicinity of the project site. The closest UCMP vertebrate locality on record is RV8601, which yielded fossil specimens of various rodents (i.e., *Microtus*, *Neotoma*, and Cricetidae) from Quaternary old alluvial deposits less than five miles southeast of the project site (UCMP 2020).

4.6.2 Regulatory Setting

a. Federal

International Building Code

The International Building Code (IBC) is published by the International Code Council, and covers major aspects of construction and design of structures and buildings. The IBC has replaced the Uniform Building Code as the basis for the California Building Code and contains provisions for structural engineering design. The 2015 IBC addresses the design and installation of structures and building systems through requirements that emphasize performance. The IBC includes codes governing structural as well as fire and life safety provisions covering seismic, wind, accessibility, egress, occupancy, and roofs.

Earthquake Hazards Reduction Act

U.S. Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives to focus on minimizing loss from earthquakes after they occur. The National Earthquake Hazards Reduction Program promotes the adoption of earthquake hazard reduction activities by all scales of government and works to develop national building standards and model codes for use by engineers, architects, and all others involved in the planning and construction of buildings and infrastructure.

b. State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act; PRC Sections 2621-2630) was passed into law following the destructive February 9, 1971 San Fernando earthquake that had a magnitude of 6.6. The Alquist-Priolo Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Alquist-Priolo Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Generally, siting of structures for human occupancy must be set back from the fault by approximately 50 feet. Therefore, if a project site is located in an Earthquake Fault Zone, the City must withhold development permits for sites within the fault zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

Seismic Safety Act

The California Seismic Safety Commission was established by the Seismic Safety Act in 1975 with the intent of providing oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The Commission's name was changed to Alfred E. Alquist Seismic Safety Commission in 2006. Since then, the Commission has prepared several documents based on recorded earthquakes, such as the 1994 Northridge earthquake, 1933 Long Beach earthquake, and the 1971 Sylmar earthquake. Some of these documents are listed as follows:

Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994

Seismic Safety in California's Schools, 2004, "Findings and Recommendations on Seismic Safety Policies and Requirements for Public, Private, and Charter Schools," report dated December 1994

Findings and Recommendations on Hospital Seismic Safety, report dated November 2001

Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006

California Earthquake Loss Reduction Plan 2007–2011, report dated July 2007

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Act, including strong ground shaking, landslides, and liquefaction. Under this Act, the State Geologist is assigned the responsibility of identifying and mapping seismic hazards. California Geological Survey (CGS) Special Publication 117, adopted in 1997 by the State Mining and Geology Board, constitutes guidelines for evaluating seismic hazards other than surface faulting, and for recommending mitigation measures as required by PRC Section 2695(a). In accordance with the mapping criteria, the CGS seismic hazard zone maps identifies areas with the potential for a ground shaking event that corresponds to 10 percent probability of exceedance in 50 years.

The purpose of the Seismic Hazards Mapping Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and state agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Seismic Hazards Mapping Act requires site-specific geotechnical investigations prior to permitting most urban development projects in seismic hazard zones.

California Building Code

The California Building Code (CBC), Title 24, Part 2, provides building codes and standards for the design and construction of structures in California. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of building and structures. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

The CBC is updated every three years by order of the legislature, with supplements published in intervening years. State Law mandates that local government enforce the CBC. In addition, a city and/or county may establish more restrictive building standards reasonably necessary because of local climatic, geological, or topographical conditions. The 2016 CBC is based on the 2015 International Building Code with the addition of more extensive structural seismic provisions.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act, as codified in California Civil Code Section 1103-1103.14, requires real estate sellers and brokers to prepare Natural Hazards Disclosure Statements upon transfer of real property if such property is located within a number of federally or state-mapped

natural hazard areas. Hazard areas covered under the disclosure form include special flood hazard areas, areas of potential flooding due to dam failure inundation, fire hazard severity zones, wildland areas, earthquake fault zones, and seismic hazard zones.

The natural hazard areas most relevant to geology and soils are earthquake fault zones and seismic hazard zones. As discussed above, the project site is not located within an earthquake fault zone. The State of California Seismic Hazard Zones Map does not identify liquefaction or seismically induced landslide hazards for the Riverside East Quadrangle, in which the project site is located (CGS 2017). However, portions of the project site have been identified locally as having high liquefaction potential (City of Riverside 2007). This analysis addresses impacts related to this seismic hazard.

National Pollutant Discharge Elimination System

The federal government administers the National Pollutant Discharge Elimination System (NPDES) permit program, which regulates discharges into surface waters under the Clean Water Act (CWA). The primary regulatory control relevant to the protection of water quality is the NPDES permit administered by the State Water Resources Control Board (SWRCB), which establishes requirements prescribing the quality of point sources of discharge and water quality objectives. These objectives are established based on the designated beneficial uses (e.g. water supply, recreation, and habitat) for a particular surface waterbody. The NPDES permits are issued to point source dischargers of pollutants to surface waters pursuant to Water Code Chapter 5.5, which implements the federal CWA. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (State Water Resources Control, Title 23, Chapter 9, Section 2200). The Regional Water Quality Control Board (RWQCB) establishes and regulates discharge limits under the NPDES permits.

Construction projects which disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). In order to obtain coverage under the Construction General Permit, a project-specific Stormwater Pollution Prevention Plan (SWPPP) must be prepared. The SWPPP outlines Best Management Practices to reduce stormwater and non-stormwater pollutant discharges, including erosion control, minimizing contact between construction materials and precipitation, and strategies to prevent equipment leakage or spills.

California Environmental Quality Act

Paleontological resources are protected under CEQA, which states in part a project will “normally” have a significant effect on the environment if it, among other things, will disrupt or adversely affect a paleontological site except as part of a scientific study. Specifically, in Section VII(f) of Appendix G of the CEQA Guidelines, the Environmental Checklist Form, the question is posed thus: “Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.” To determine the uniqueness of a given paleontological resource, it must first be identified or recovered (i.e., salvaged). Therefore, CEQA mandates mitigation of adverse impacts, to the extent practicable, to paleontological resources.

CEQA does not define “a unique paleontological resource or site.” However, the SVP has defined a “significant paleontological resource” in the context of environmental review as follows:

> Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are typically to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (SVP 2010).

The loss of paleontological resources meeting the criteria outlined above (i.e., a significant paleontological resource) would be a significant impact under CEQA, and the CEQA lead agency is responsible for ensuring that impacts to paleontological resources are mitigated, where practicable, in compliance with CEQA and other applicable statutes.

California Public Resources Code

Section 5097.5 of the Public Resources Code states:

> No person shall 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, 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. Violation of this section is a misdemeanor.

Here "public lands" means those owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

c. Local

Santa Ana Regional Water Quality Control Board

The City of Riverside is under the jurisdiction of RWQCB Region 8, the Santa Ana Regional Water Quality Control Board (SARWQCB). The SARWQCB provides permits for projects that may affect surface waters and groundwater locally, and is responsible for preparing the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The Basin Plan serves as the basis for the SARWQCB's regulatory programs and incorporates an implementation plan to ensure water quality objectives are met.

City of Norco General Plan

The following policies in the City of Norco General Plan Safety Element are relevant to the project:

Policy 2.2.1a: Continue to require all new development to conform to the currently adopted Uniform Building Code and seismic safety regulations.

Policy 2.2.1b: Maintain a program to systematically mitigate existing seismic-related structural hazards (i.e. mitigation program for unreinforced masonry buildings).

Policy 2.2.1c: Give special consideration to hazardous structures deemed to be of historical value when determining whether alteration or destruction of these facilities is necessary in mitigating the identified geologic hazards.

Policy 2.2.1d: Require site-specific geologic engineering studies in accordance with the Alquist-Priolo Earthquake Fault Zoning Act as part of the development review process, especially in areas of high potential for liquefaction as presented in Exhibit 1 (Seismic Hazards Map).

The City of Norco does not specifically address paleontological resources in the General Plan.

City of Norco Municipal Code

Norco Municipal Code Section 15.02.010 incorporates the CBC which reference applicable standards and documentation requirements that address seismic safety. Norco Municipal Code Chapter 15.70 incorporates the requirements of the Riverside County Municipal NPDES Storm Water Permit (Order No. R8-2010-0033) issued by the RWQCB pursuant to Section 402(p) of the Clean Water Act.

4.6.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states the geological and paleontological effects of the project would be significant if the project would:

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 a known fault (Refer to Division of Mines and Geology Special Publication 42);
   ii. Strong seismic ground shaking;
   iii. Seismic-related ground failure, including liquefaction;
   iv. Landslides.
2. Result in substantial soil erosion or the loss of topsoil;
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 or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
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;
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

b. Methodology

Geology and Soils

As stated above, a project-specific Geotechnical Investigation was prepared for the project by GeoTek, Inc. (2019, Appendix G). The scope of the investigation included a review of available geologic and geotechnical data and aerial photographs, field and subsurface exploration, laboratory testing, and engineering analyses. The report concluded that there were no soil or geologic conditions encountered during the investigation that would preclude the development of the project.

Paleontological Resources Sensitivity

Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits within which fossils are buried and physically destroy the fossils. Since fossils are the remains of prehistoric animal and plant life, they are considered to be nonrenewable. Such impacts have the potential to be significant and, under the CEQA Guidelines, may require mitigation. Sensitivity is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey.

The discovery of a vertebrate fossil locality is of greater significance than that of an invertebrate fossil locality, especially if it contains a microvertebrate assemblage. The recognition of new vertebrate fossil locations could provide important information on the geographical range of the taxa, their radiometric age, evolutionary characteristics, depositional environment, and other important scientific research questions. Vertebrate fossils are almost always significant because they occur more rarely than invertebrates or plants. Thus, geological units having the potential to contain vertebrate fossils are considered the most sensitive.

The SVP outlines in its Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010) guidelines for categorizing paleontological sensitivity of geologic units within a project area. The SVP (2010) describes sedimentary rock units as having a high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrates or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically or stratigraphically, taxonomically, or regionally. The paleontological sensitivity of the project site has been evaluated according to the following SVP (2010) categories, which are presented below.

High Potential (Sensitivity)

Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both: (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or

small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as significant. Full-time monitoring is typically recommended during any project-related ground disturbance in geologic units with high sensitivity.

Low Potential (Sensitivity)

Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic (processes affecting an organism following death, burial, and removal from the ground), phylogenetic species (evolutionary relationships among organisms), and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations.

Undetermined Potential (Sensitivity)

Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

No Potential

Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources. For geologic units with no sensitivity, a paleontological monitor is not required.

c. Impact Analysis and Mitigation Measures

Threshold 1.i: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Refer to Division of Mines and Geology Special Publication 42);
ii. Strong seismic ground shaking;
iii. Seismic-related ground failure, including liquefaction;
iv. Landslides?

Impact GEO-1 **THE PROJECT SITE IS NOT LOCATED ON AN ACTIVE FAULT NOR CONTAINS GEOLOGIC UNITS, SOILS, OR TOPOGRAPHIC FEATURES THAT WOULD RESULT IN SEISMIC-RELATED GROUND FAILURE, LIQUEFACTION, OR LANDSLIDES. THEREFORE, THE PROJECT WOULD HAVE A LESS THAN SIGNIFICANT IMPACT.**

According to the City of Norco General Plan Safety Element, there are no active or potentially active faults located on the project site and the potential for surface rupture on the project site due to

seismic fault activities is considered low (City of Norco 2013). However, the site is in the seismically active southern California region, and could be subjected to moderate to strong ground shaking in the event of an earthquake nearby faults such as the Chino Fault, located more than three miles from the project site. Therefore, implementation of the project would not expose people or structures to potential adverse effects from seismic events, such as risk or loss, injury, or death.

The project would construct multiple residential and commercial structures, all of which would be required to comply with applicable CBC Title 24 regulations, including engineering standards appropriate for seismic ground shaking hazards. All proposed construction would also be developed in compliance with Title 15 of the Norco Municipal Code, the standard earthwork recommendations provided in the *Geotechnical Investigation*, and all other applicable ordinances adopted by the City related to construction and safety. The City of Norco Building and Safety Division would review proposed building plans during building plan checks, issuance of building permits, and inspection of buildings during construction; all of which would ensure required CBC seismic safety measures are incorporated into the project. The City's project review process would verify project compliance with the CBC. Therefore, the project would have a less than significant impact from rupture of a known earthquake fault and seismic ground shaking.

As stated above in Section 4.6.1, *Setting*, the project site is located in an area mapped as having "high" liquefaction potential in Riverside County. A liquefaction analysis was completed for the project site to assess the liquefaction potential of the site soils during a seismic event. The analysis results determined that the project site has low potential for liquefaction during a seismic event. The soils above groundwater are subject to minor dry settlement; however, the magnitude of dry settlement is considered minimal and is not a design constraint for the project. Soil test results also determined that project site soils exhibit "low" to "very low" expansion potential (Appendix G).

Evidence of ancient landslides or slope instabilities at this site was not observed during site investigation; the potential for landslides is considered negligible for project design purposes. Therefore, impacts including the risk of loss, injury, or death involving associated with liquefaction and seismic-related ground failure, expansive soils, and landslides would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

There would be no impact without mitigation.

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

Impact GEO-2 TEMPORARY EROSION AND/OR LOSS OF TOPSOIL DURING PROJECT CONSTRUCTION WOULD BE REDUCED WITH IMPLEMENTATION OF THE PROJECT SWPPP. PROJECT SITE PLANS INCLUDE LANDSCAPING AND HARDSCAPING, WITH NO LOOSE OR EXPOSED TOPSOIL. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project site is relatively flat with elevations ranging from 600 to 640 feet above mean sea level, with surface drainage generally to the south-southwest. As discussed in Section 4.3, *Biological Resources*, the project site shows evidence of previously grading activities and has been regularly tilled in compliance with Norco Municipal Code Chapter 9.40 (hazardous vegetation and weed abatement).

Construction activities may result in temporary erosion and/or loss of topsoil. However, the project would be required to obtain coverage under the State Construction General Permit for stormwater and implement a SWPPP to protect water quality during construction. As discussed in Section 4.9, *Hydrology and Water Quality*, the project SWPPP would include best management practices to control erosion during construction.

Upon project completion, the project site would be stabilized with landscaping and hardscaping, and would not contain any loose or exposed topsoil. Conditions that would cause long-term erosion would not be present on the project site. Therefore, impacts related to soil erosion or loss of topsoil would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

There would be no impact without mitigation.

Threshold 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 or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
Threshold 4:	Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact GEO-3 THE PROJECT SITE DOES NOT CONTAIN UNSTABLE OR EXPANSIVE GEOLOGIC UNITS OR SOILS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As stated above in Section 4.6.1, *Setting*, the project site is underlain by old fan deposits and granitic bedrock, which provide stable geologic and soil conditions. Sampled bedrock was sampled as very dense fine to coarse sands. Soil testing completed for the project site determined near surface soils as having “very low” to “low” expansion potential (Appendix G). Implementation of the project would not result in soil instability, landslides, lateral spreading, subsidence, liquefaction, or collapse based on the findings of the *Geotechnical Investigation* Therefore, the project would have a less than significant impact.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

There would be no impact without mitigation.

Threshold 5:	Would the project 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?

Impact GEO-4 THE PROJECT WOULD NOT INCLUDE THE INSTALLATION OR USE OF SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

The project would be served by the City sewer system and would not include the use of septic tanks or alternative wastewater disposal systems. Therefore, the project would have no impact.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

There would be no impact without mitigation.

Threshold 6:	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact GEO-5 GROUND DISTURBING ACTIVITIES DURING PROJECT CONSTRUCTION MAY DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION MEASURE GEO-1.

Based on a paleontological literature review and records search results, the paleontological sensitivity of the geologic units underlying the project site were determined in accordance with criteria set forth by the SVP (2010). Cretaceous plutonic rocks of the Peninsular Ranges (Klst, Kmp), which are mapped in the northern project site, have no paleontological sensitivity since the physical parameters of their formation are not conducive to fossil preservation. Quaternary old (late to early Pleistocene) alluvial fan (Qof_3) deposits have the potential to contain buried intact paleontological resources because these units have proven to yield scientifically significant vertebrate fossils near the project site (McLeod 2020; UCMP 2020). As discussed above, fine-grained alluvial deposits of late Pleistocene-age or older are conducive to fossil preservation; however, coarse-grained alluvial deposits typically are not since the high energy conditions in which they are deposited are not conducive to fossil preservation. Given the reported depths of recovery of nearby fossil localities, it is estimated that the transition between coarse and fine-grained alluvial and fluvial sediments within the project site likely to occur at about 10 feet below ground surface (McLeod 2020). Therefore, the paleontological sensitivity of the alluvial and fluvial (Qof_3, Qvoa) deposits within the project site is determined to be low at the surface, increasing to high at a depth of approximately 10 feet below ground surface (McLeod 2020).

As proposed, project ground disturbance would reach depths of up to 30 feet below ground surface for excavations associated with the mixed-use development. Because there is the potential to uncover paleontological resources in the project site, ground disturbing activities in previously undisturbed portions of the project site could potentially result in significant impacts to paleontological resources. Impacts would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data.

Implementation of Mitigation Measure GEO-1 would ensure that any unanticipated fossils present on site are preserved and would ensure that potential impacts to paleontological resources would be less than significant by providing for the recovery, identification, and curation of previously unrecovered fossils.

Mitigation Measures

GEO-1 Implement Paleontological Resources Mitigation

The following mitigation measures shall only be implemented during ground construction activities (i.e., grading, trenching, foundation work, excavations) where ground disturbance exceeds 10 feet below ground surface within project areas underlain by Quaternary old sedimentary deposits (i.e., Qof3 and Qvoa).

a. **Develop a Paleontological Resources Impact Mitigation Plan.** Prior to the start of construction, a qualified professional paleontologist shall be retained to prepare and implement a Paleontological Resources Impact Mitigation Plan (PRIMP) for the project. A Qualified Paleontologist is an individual who meets the education and professional experience standards as set forth by the SVP (2010), which recommends the paleontologist shall have at least a Master's Degree or equivalent work experience in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques. The PRIMP shall describe mitigation recommendations in detail, including paleontological monitoring procedures; communication protocols to be followed in the event that an unanticipated fossil discovery is made during project development; and preparation, curation, and reporting requirements.

b. **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the commencement of ground disturbing activities, the Qualified Paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting. In the event a fossil is discovered by construction personnel anywhere in the project area, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before re-starting work in the area. If it is determined that the fossil(s) is (are) scientifically significant, the qualified paleontologist shall complete the mitigation outlined below to mitigate impacts to significant fossil resources.

c. **Paleontological Monitoring.** Initially, full-time monitoring shall be conducted during ground construction activities where ground disturbance exceeds 10 feet below ground surface within deposits of Quaternary old (early Holocene to late Pleistocene) alluvial fan (Qof3) and axial-channel (Qvoa) deposits. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who meets the minimum qualifications per standards set forth by the SVP (2010), which includes a B.S. or B.A. degree in geology or paleontology with one year of monitoring experience and knowledge of collection and salvage of paleontological resources. The Qualified Paleontologist shall determine the duration and timing of the monitoring. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely.

    i. **Fossil Discoveries.** In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified

Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.

ii. **Salvage of Fossils.** If fossils are discovered, all work in the immediate vicinity should be halted to allow the paleontological monitor, and/or lead paleontologist to evaluate the discovery and determine if the fossil may be considered significant. If the fossils are determined to be potentially significant, the qualified paleontologist (or paleontological monitor) should recover them following standard field procedures for collecting paleontological as outlined in the PRIMP prepared for the project. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist should have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. If fossils are discovered, the Qualified Paleontologist (or Paleontological Monitor) shall recover them as specified in the project's PRIMP.

d. **Preparation and Curation of Recovered Fossils.** Once salvaged, significant fossils should be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection (such as the NHMLAC), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Paleontologist.

e. **Final Paleontological Mitigation Report.** At the conclusion of laboratory work and museum curation, a final report shall be prepared describing the results of the paleontological mitigation monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The final report shall be submitted to the City of Norco. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would ensure project impacts to paleontological resources would be avoided. The project would have a less than significant impact with mitigation.

4.6.4 Cumulative Impacts

The planned and pending projects in the project site vicinity are listed in Table 3-1 of Section 3, *Environmental Setting*. Cumulative projects considered in this analysis include residential, warehouse, commercial, hotel, school, and recreational land uses. The potential cumulative exposure of people or structures to unstable geologic units and/or expansive soils that may result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, movement, or collapse tend to be region wide in nature, though each site-specific development has unique geologic considerations. Each cumulative project is subject to uniform site development policies and construction standards imposed by the City that are based on CBC requirements and site-specific geotechnical studies. Adherence to City construction standards and CBC requirements would ensure cumulative impacts on geology and soils would be less than significant.

Mitigation Measure GEO-1 is included to avoid potential direct impacts to paleontological resources that may occur during project construction and ground disturbance activities, which would reduce project impacts to less than significant. Cumulative projects would be required to implement similar project-site specific measures. Therefore, cumulative impacts on paleontological resources would be less than significant.

4.7 Greenhouse Gas Emissions

This section analyzes the project's potential impacts on greenhouse gas (GHG) emissions and climate change. The analysis contains a description of the GHG setting for the project site and the surrounding area, the regulatory setting for GHG management and reduction measures, and a discussion of potential temporary impacts relating to construction activity and potential long-term impacts associated with project operation.

The analysis is based on the Air Quality and Greenhouse Gas Emissions Study prepared by Rincon Consultants, Inc. (2020) which is included as Appendix C, and the Traffic Impact Analysis (TIA) prepared by Urban Crossroads (2020) which is included as Appendix L. The Air Quality and Greenhouse Gas Emissions Study is based on information compiled from the project applicant based on proposed project components and features, and modeling results from the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. (The contents and methodology of the TIA are further discussed in Section 4.13, *Transportation.*)

4.7.1 Setting

a. Climate Change and Greenhouse Gases

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills.

Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (United States Environmental Protection Agency [USEPA] 2018). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane CH_4 has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2007).

b. Greenhouse Gas Emissions Inventory

Worldwide anthropogenic emissions of GHGs were approximately 46,000 million metric tons (MMT, or gigatonnes) CO_2e in 2010 (IPCC 2014). CO_2 emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, carbon dioxide was the most abundant accounting for 76 percent of total 2010 emissions. Methane

emissions accounted for 16 percent of the 2010 total, while nitrous oxide and fluorinated gases accounted for six percent and two percent respectively (IPCC 2014).

Federal Emissions Inventory

Total United States GHG emissions were 6,511.3 million metric tons of CO_2e in 2016 (USEPA 2018). Total United States emissions have increased by 2.4 percent since 1990; though emissions decreased by 1.9 percent from 2015 to 2016 (USEPA 2018). The decrease from 2014 to 2015 was a result of multiple factors, including: (1) substitution from coal to natural gas and other non-fossil energy sources in the electric power sector, and (2) warmer winter conditions in 2016 resulting in a decreased demand for heating fuel in the residential and commercial sectors (USEPA 2018). Since 1990, U.S. emissions have increased at an average annual rate of 0.1 percent. In 2015, the industrial and transportation end-use sectors accounted for 29 percent each of GHG emissions (with electricity-related emissions distributed), respectively. Meanwhile, the residential and commercial end-use sectors accounted for 15 percent and 16 percent of CO_2e emissions, respectively (USEPA 2018).

California Emissions Inventory

Based on the California Air Resources Board's (CARB) California Greenhouse Gas Inventory for 2000-2017, California produced 424 MMT of CO_2e in 2016 (CARB 2018a). The major source of GHGs in California is associated with transportation, contributing 40 percent of the State's total GHG emissions. The industrial sector is the second largest source, contributing 21 percent of the State's GHG emissions, and electric power accounted for approximately 15 percent (CARB 2018a). California emissions are due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. CARB has projected that statewide unregulated GHG emissions for the year 2020 will be 509 MMT of CO_2e (CARB 2018b). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

Local Emissions Inventory

The City of Norco does not have an adopted Climate Action Plan (CAP) or current GHG inventory. The Western Riverside Council of Governments (WRCOG), the subregional planning agency which includes Norco, prepared a Subregional CAP with a 2010 GHG inventory for participating jurisdictions. According to the WRCOG Subregional CAP, Norco produced approximately 200,000 metric tons (MT) CO_2e in 2010, which equates to a per capita emissions rate of 3.6 MT CO_2e (WRCOG 2014). Similar to the State, the major source of GHGs in Norco is associated with transportation, contributing 70 percent of the City's total emissions. Residential energy use is the second largest source, contributing 17 percent of the City's emissions, followed by commercial/industrial uses, which contributed 12 percent.

c. Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous

decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) for the decade from 2006 to 2015 was approximately 0.87° Celsius (C) (0.75°C to 0.99°C) higher than the average GMST over the period from 1850 to 1900. Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations confirm that LSAT as well as sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014, 2018).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 1° Fahrenheit (F) to 2°F higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include loss in water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). While there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the State as well as regionally-specific climate change case studies (State of California 2018). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone (O_3), but the magnitude of the effect, and therefore its indirect effects, are uncertain. As temperatures have increased in recent years, the area burned by wildfires throughout the State has increased, and wildfires have been occurring at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality would worsen. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State (California Natural Resources Agency [CNRA] 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. For example, many southern California cities have experienced their lowest recorded annual precipitation twice within the past decade; however, in a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR] 2008). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. However, the average early spring snowpack in the

western United States, including the Sierra Nevada Mountains, decreased by about ten percent during the last century. During the same period, sea level rose over 5.9 inches along the central and southern California coast (State of California 2018). The Sierra snowpack provides the majority of California's water supply by accumulating snow during the State's wet winters and releasing it slowly during the State's dry springs and summers. A warmer climate is predicted to reduce the fraction of precipitation falling as snow and result in less snowfall at lower elevations, thereby reducing the total snowpack (DWR 2008; State of California 2018). The State of California projects that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

As discussed above, climate change could potentially affect the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Climate change has the potential to induce substantial sea level rise in the coming century (State of California 2018). The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 millimeters (mm) per year, which is double the observed 20th century trend of 1.6 mm per year (World Meteorological Organization [WMO] 2013). As a result, global mean sea levels averaged over the last decade were about eight inches higher than those of 1880 (WMO 2013). Sea levels are rising faster now than in the previous two millennia, and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea–level rise of 10 to 37 inches by 2100 (IPCC 2018). A rise in sea levels could completely erode 31 to 67 percent of southern California beaches, result in flooding of approximately 370 miles of coastal highways during 100-year storm events, jeopardize California's water supply due to salt water intrusion, and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). In addition, increased CO_2 emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a $50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2018). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent; water demand could increase as hotter conditions lead to the loss of soil moisture; crop-yield could be threatened by water-induced stress and extreme heat waves; and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the annual average maximum daily temperatures in California could rise by 4.4 to 5.8°F in the next 50 years and by 5.6 to 8.8°F in the next century (State of California 2018). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals related to: (1) timing of ecological events; (2) geographic distribution and range; (3) species' composition and the incidence of nonnative species within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

4.7.2 Regulatory Setting

a. Federal Regulations

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines, and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that establishes the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

b. State

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has numerous regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below.

California Advanced Clean Cars Program

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit

34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

Assembly Bill 32

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2e. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the CNRA adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP).
On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. WRCOG is a subregion within the Southern California Association of Governments (SCAG) region. SCAG was assigned targets of an eight percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

Senate Bill 32

On September 8, 2016, the governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with statewide per capita goals of six MT CO_2e by 2030 and two MT CO_2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State (CARB 2017).

Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

The bill also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, the governor issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the CNRA has adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in

CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs.

c. Local

SCAG 2016 Regional Transportation Plan/Sustainable Communities Strategy

On September 23, 2010, CARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an eight percent reduction in GHGs from transportation sources by 2020 and a 13 percent reduction in GHGs from transportation sources by 2035. On April 7, 2016, SCAG adopted the 2016 RTP/SCS, which includes a number of strategies and objectives to encourage transit-oriented and infill development and use of alternative transportation to minimize vehicle use.

WRCOG Climate Action Plan

WRCOG's 2014 CAP (WRCOG Subregional CAP) establishes a subregional GHG emissions target of 15 percent below 2010 levels by 2020 and 49 percent below 2010 levels by 2035 (WRCOG 2018). The WRCOG Subregional CAP establishes policies and programs that are consistent with and support statewide GHG emissions reductions targets and strategies. The WRCOG Subregional CAP is not however a qualified plan that would allow for streamlining of GHG emissions impacts analyses. Norco is a participant party to the WRCOG Subregional CAP and is subject to applicable policies and programs.

City of Norco General Plan

The City of Norco General Plan Conservation Element contains goals and policies for Norco's vision for air quality, GHG reduction, and conservation (City of Norco 2014). General Plan Conservation Element Chapter 2.5 identifies regional sources of pollution, geographic considerations affecting air quality in Norco, and various goals and policies intended to address GHG issues in the City. The following policies in the General Plan Conservation Element are relevant to the project:

- **Policy 2.9.1:** As one of the 12 cities that are part of the WRCOG [Subregional] CAP, be an active participant in the subregional CAP emissions reduction target measures and action steps, to achieve compliance with the California Global Warming Solutions Act of 2006 (AB 32). Consider adoption of the WRCOG [Subregional] CAP as the City's CAP.
- **Policy 2.9.2:** Implement the applicable local strategies as feasible from the RTP/SCS 2012-2035
- **Policy 2.9.3:** Increase opportunities and accessibility for trail riding, cycling, and walking. These can include more hitching posts and bike storage facilities at commercial sites, and more interior-block pedestrian paths that are in addition to street-side sidewalks and connect commercial, office, and public building sites in a more functional pedestrian circulation system.
- **Policy 2.9.10 Land Use Agricultural Policy:** Encourage local production of food consistent with the City's small plot agricultural lifestyle and zoning. Establish a local farmers market to help in the distribution of goods that are produced here.
- **Policy 2.9.11 Land Use Parking Management Policy:** Encourage shared parking and pedestrian access between adjacent similar land uses encourage walking while at the same time discouraging short vehicle trips between close destinations.

- **2.9.12 Land Use Mixed Use Development Policy:** Encourage a mix of land uses around high-density projects to encourage walking for convenience items as opposed to vehicle trips
- **2.9.15 Building Utility Efficiency Policy:** In addition to compliance with the California Green Building Code requirements, encourage innovation in residential and non-residential design to further minimize ultimate consumption of energy and water resources including the development of green roofs.

4.7.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states the GHG emissions impacts of the project would be significant if the project would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

According to CEQA Guidelines, projects can tier from a qualified GHG reduction plan that allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (AEP 2016). However, although the WRCOG has completed an inventory of community emissions for the region including the City of Norco, the WRCOG CAP is not a qualified GHG reduction plan and thus this approach is not currently feasible.

Project-Specific Efficiency Threshold

This analysis evaluates potential GHG emissions generated by the project against a locally-appropriate, project-specific efficiency threshold derived from the SB 32 target and the City's GHG inventory from 2010, which is consistent with current best practices in the industry (AEP 2016). This provides a quantitative assessment of the project's GHG emissions compared to a project-specific threshold. Because the GHG emissions target set by SB 32 is significantly more stringent than the AB 32 target, if the project is found to be consistent with the SB 32 emission reduction target, then it is considered consistent with the AB 32 reduction target as well.

The locally-appropriate, project-specific efficiency threshold used in this analysis was created to comply with the CEQA Guidelines and interpretative GHG case law. An efficiency threshold is calculated by dividing the allowable GHG emissions inventory in a selected calendar year by the

service population (residents plus employees) in that year. This calculation identifies the quantity of emissions that can be generated on a per-service population basis without significantly impacting the environment. This approach is appropriate for the project because it measures the project's emissions on a local per-service population basis to determine its overall GHG emissions efficiency relative to regulatory GHG emission reduction goals.

For the project, an efficiency threshold was calculated based on the target GHG emission levels that would be consistent with the State 2030 target using the service population of the City of Norco in year 2030. This locally-appropriate, project-specific quantitative threshold is derived, in part, from the City's 2010 GHG inventory in line with CARB's recommendations in the 2008 Climate Change Scoping Plan and the 2017 Scoping Plan (CARB 2008; 2017). Consistent with the legal guidance provided in the Golden Door (2018) and Newhall Ranch (2015) decisions, regarding the correlation between state and local conditions, the 2010 GHG inventory was used to calculate a locally-appropriate, evidence-based, project-specific threshold consistent with California's SB 32 target. Accordingly, the threshold established in this report is a project-specific threshold, as opposed to a threshold for general use.

As part of the WRCOG Subregional CAP, the City of Norco completed a 2010 GHG inventory that calculated communitywide emissions of 233,908 MT of CO_2e per year (Table 4.7-1). Energy use for water for potable water was included in the residential and commercial energy use sector. There is no wastewater treatment facility within Norco; therefore, no emissions were associated with the wastewater sector. Because the project is a hotel, food garden, and multi-family apartment complex, the Commercial/Industrial Energy, Transportation, Residential Energy, and Waste sectors are appropriate to use in developing a project-specific threshold to capture GHG emissions from future guests, residents and employees of the project generated from energy use, on-road vehicle trips, and waste. Therefore, all sector emissions within the City's 2010 inventory are applicable to the project and were utilized in developing a project-specific efficiency threshold.

Table 4.7-1 City of Norco 2010 Inventory

Source	2010 Total (MT of CO_2e)
Transportation	155,105
Commercial/Industrial Energy	29,301
Residential Energy	43,149
Waste	6,353
Total Emissions	**233,908**

Note: GHG Inventory Report includes the following jurisdictions; Riverside, Temecula, Jurupa valley, Hemet, Perris, Norco, San Jacinto, Banning, Eastvale, Wildomar, Calimesa, and Canyon Lake

Source: WRCOG 2014

AB 32 set a statewide target of reducing GHG emissions to 1990 levels by 2020. Therefore, for the subregional area to be consistent with AB 32, annual GHG emissions levels from project-applicable sectors would need to be reduced by 15 percent below 2010 levels by 2020 to approximately 198,822 MT of CO_2e per year. In addition, SB 32 set a statewide GHG emission reduction target of 40 percent below 1990 levels. Therefore, annual GHG emissions levels from project-applicable sectors would need to be further reduced by 40 percent below 1990 levels to approximately 119,923 MT of CO_2e per year to be consistent with SB 32.

Accordingly, the 2030 project-specific efficiency threshold can be calculated by dividing total GHG emissions by the citywide service population (residents + employees) for year 2030. Based on SCAG's Projections 2040 tool, the City's 2030 service population would be approximately 51,479 persons (30,243residents plus 21,236 jobs) (SCAG 2016). Therefore, the 2030 locally-appropriate, project-specific threshold would be approximately 2.3 MT of CO_2e per year per service population as shown in Table 4.7-2.

Table 4.7-2 Locally-Applicable Project-Specific Efficiency Threshold

Target Year	Value
2010 Baseline Levels[1]	233,908 MT of CO2e/year
2020 Target (AB 32)[2]	198,822 MT of CO2e/year
2030 Target (SB 32)[3]	119,293 MT of CO2e/year
2030 Service Population[4]	51,479 persons
2030 Project-Specific Efficiency Threshold	**2.3 MT of CO_2e per service person per year**

[1] 2010 emission levels from project-applicable sectors (Table 4.7-1)

[2] AB 32 sets a target of reducing GHG emissions to 1990 levels (i.e., 15 percent below 2010 levels) by 2020.

[3] SB 32 sets a target of reducing GHG emissions 40 percent below 1990 levels by 2030.

[4] 30,243 residents + 21,236 jobs

Source: SCAG 2016

Project Service Population

Service population is traditionally defined as the summation of residents and employees that are generated by a project. However, beyond the residential component of the project, the project also includes a hotel and food garden where the primary user of these land uses are the hotel guests and food garden patrons. Per CalEEMod estimates, the 320-unit mid-rise apartments would house approximately 915 residents (Appendix C). Number of project employees was estimated based on SCAG employee density factors by land use category (SCAG 2001). Number hotels guests estimated based on average hotel room size and a 75 percent occupancy rate. The number of food garden patrons was based on the assumed total seating provided in the food garden seating area calculations and site map. Because the primary uses of the project include residences, a hotel, and food garden, the service population is equivalent to the sum of its residents, employees, hotel guests, and food garden patrons as shown in Table 4.7-3

Table 4.7-3 Project-Specific Service Population

Population	Persons
Residents[1]	915
Employees[2]	44
Average Hotel Guests[3]	135
Average Food Garden Patrons[4]	427
Total Service Population	**1,521**

[1] See CalEEMod (Appendix C)

[2] See Table 4.2-6 for commercial employee generation rates based on the SCAG employee density factors (SCAG 2001).

[3] 120 hotel rooms with approximately 1.5 persons per room and average occupancy rate of 75 percent = 135persons

[4] 7,119 square feet of food garden seating space assuming 15 square feet per person for main seating area and 30 square feet per person for soft seating area = 427 persons (Appendix B)

b. Methodology

Calculations of CO_2, CH_4, and N_2O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO_2, CH_4, and N_2O because these make up 98.9 percent of all GHG emissions by volume (IPCC 2014) and are the GHG emissions that the project would emit in the largest quantities. Emissions of all GHGs are converted into their equivalent GWP in terms of CO_2e. GHG emissions associated with the project were calculated using CalEEMod (Appendix C).

Construction Emissions

Although construction activity is addressed in this analysis, the California Air Pollution Control Officers Association (CAPCOA) does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* white paper, “more study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA 2008). Nevertheless, air districts such as the SCAQMD have recommended amortizing construction-related emissions over a 30-year period in conjunction with the project’s operational emissions (SCAQMD 2008).

Construction of the project would generate temporary GHG emissions primarily as a result of operation of construction equipment, vehicle trips from the transport of construction workers to and from the project site, and from the export of earth materials off-site by heavy trucks. CalEEMod provides an estimate of emissions associated with the construction period, based on the duration of construction activity, area of disturbance, and anticipated equipment used during construction.

Operational Emissions

In CalEEMod, operational sources of criteria pollutant emissions include area, energy, and mobile sources; GHG emissions include water and solid waste sources in addition to area, energy, and mobile sources. The project’s use was modeled using the following land use subtypes and square footage consistent with the project plans (Appendix B): 410,568 gross sf of “mid-rise residential” with 320 dwelling units and 12,500 sf of “health club” based on the leasing office, fitness center and lounge for the proposed residential component; 8,700 sf of “fast food restaurant w/o drive thru” and 322,600 sf of “city park” which includes open recreational space and 800 sf restroom and

storage room for the food garden component; and 70,000 sf of "hotel" for the proposed hotel. In addition, a "Parking Lot" land use subtype was modeled with 669 parking spaces covering approximately four acres to represent parking not included in the single garages associated with the proposed residences. CalEEMod methodologies for operational emissions pertaining to energy use, area sources, waste sources, water and wastewater sources, and mobile sources are detailed in Section 4.2, *Air Quality*, Subsection 4.2.3, *Impact Analysis*, and in the Air Quality and GHG Emissions Study (Appendix C).

c. Project Impacts and Mitigation Measures.

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

Impact GHG-1 THE PROJECT WOULD GENERATE NEW GHG EMISSIONS FROM TEMPORARY CONSTRUCTION ACTIVITIES AND LONG-TERM PROPOSED USES. HOWEVER, THE PER SERVICE CAPITA GHG EMISSIONS WOULD NOT EXCEED THE PROJECT-SPECIFIC GHG EFFICIENCY THRESHOLD. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project would produce direct and indirect GHG emissions from the use of construction equipment, consumer products and landscaping equipment, electrical and natural gas consumption, water use and wastewater generation, and from the disposal of solid waste. Mobile emissions from trucks accessing the site during project construction and from vehicles accessing the site during project operation would be the greatest source of GHG emissions from the project. The determination of GHG emissions impact significance is based on the locally-applicable, project-specific threshold and consistency with applicable plans and policies

Construction GHG Emissions

It was assumed that construction activity would begin in July 2021 with completion by December 2024. As shown in

Table 4.7-4, construction activity for the project would generate an estimated 3,514.8 MT CO_2e. When amortized over a 30-year period, construction of the project would generate approximately 117.2 MT CO_2e per year.

Table 4.7-4 Estimated Construction Emissions of Greenhouse Gases

Construction Year	Annual Emissions MT CO_2e
2021	303.4
2022	1,248.5
2023	1,484.6
2024	478.3
Total	**3,514.8**
Amortized over 30 years	**117.2**

Note: Emissions modeling was completed using CalEEMod, Annual Table 2.1 "Overall-mitigated construction" (Appendix C).

Source: Rincon Consultants, Inc. 2020 (Appendix C)

Total Project GHG Emissions

Table 4.7-5 combines the construction and operational GHG emissions associated with development of the project. The project would involve construction of new residential and commercial development. Mobile emissions generated by the project, which account for approximately 58 percent of total project emissions as summarized in Table 4.7-5, would be new emissions associated with travel to and from the project site by project residents, hotel guests, employees, and food garden patrons.

Table 4.7-5 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions MT CO_2e
Construction	117.2
Operational	
Area	5.5
Energy	997.2
Solid Waste	146.9
Water	116.6
Mobile	
CO_2 and CH_4	1,758.9
N_2O	37.5
Total Emissions	**3,179.7**
Service Population	1,521
Emissions per Service Person (MT CO_2e/SP/year)	**2.09**
Project-Specific Efficiency Threshold (MT CO_2e/SP/year)	2.3
Exceed Project-Specific Threshold?	**No**

Note: See Appendix C CalEEMod results-Annual 2030 Table 2.2 "Overall-mitigated operational" and N_2O mobile emissions modeling.
Source: Rincon Consultants, Inc. 2020 (Appendix C)

As shown in Table 4.7-5, annual emissions from the project would be approximately 3,179.7 MT CO_2e per year or 2.09 MT CO_2e/SP/year, which would not exceed the locally-applicable, project-specific threshold of 2.3 MT of CO_2e/SP/ year. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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

Impact GHG-2 PROJECT EMISSIONS WOULD BE BELOW THE PROJECT-SPECIFIC EFFICIENCY THRESHOLD, CONSISTENT WITH THE STATEWIDE 2017 SCOPING PLAN REDUCTION TARGETS, AND THE PROJECT WOULD BE CONSISTENT WITH APPLICABLE GHG REDUCTION MEASURES OF SCAG'S 2016 RTP/SCS AND THE WRCOG SUBREGIONAL CAP. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The principal State plan and policy adopted to reduce GHG emissions is AB 32, the California Global Warming Solutions Act of 2006, and the follow up, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. The 2017 Scoping Plan, which outlines a framework to achieve SB 32's 2030 target, emphasizes innovation, adoption of existing technology, and strategic investment to support its strategies. Statewide plans and regulations in support of these strategies, such as GHG emissions standards for vehicles (AB 1493), the Low Carbon Fuel Standard, and regulations requiring an increasing fraction of electricity to be generated from renewable sources, are being implemented at the statewide level; as such, compliance at a project level would occur as implementation continues statewide. As stated above and shown in Table 4.7-5, the project would not exceed the project-specific efficiency threshold, which is developed based on the 2017 Scoping Plan's 2030 GHG emissions reduction goal of 40 percent below 1990 emissions. Therefore, the project would be consistent with the 2017 Scoping Plan and project impacts would be less than significant.

SCAG 2016 RTP/SCS

The SCAG 2016 RTP/SCS was created to outline a growth strategy to meet GHG emission reduction targets, and includes a commitment to reduce emissions from transportation sources by promoting compact and infill development to comply with SB 375. As discussed in Section 4.2, *Air Quality*, and in the Air Quality and GHG Emission Study (Appendix C), the project would not exceed the population growth assumptions and would not inhibit the measures identified in the 2040 RTP/SCS to meet SCAG's required targets from being implemented. The project would be consistent with applicable GHG emission reduction strategies in the 2016 RTP/SCS, as shown in Table 4.7-6. Therefore, the project would not conflict with the 2016RTP/SCS and project impacts would be less than significant.

Table 4.7-6 Project Consistency with Applicable SCAG 2016 RTP/SCS GHG Emission Reduction Strategies

Strategy/Action	Project Consistency
Land Use and Transportation	
Focus new growth around transit. The 2016 RTP/SCS land use pattern reinforces the trend of focusing growth in the region's High Quality Transit Areas (HQTAs). Concentrating housing and transit in conjunction concentrates roadway repair investments, leverages transit and active transportation investments, reduces regional life cycle infrastructure costs, improves accessibility, avoids greenfield development, and has the potential to improve public health and housing affordability. HQTAs provide households with alternative modes of transport that can reduce VMT and GHG	**Consistent.** There are two bus stops located along Hamner Avenue that are within 1,000 feet of the project site (Hamner + Lampton stop, approximately 760 feet north; and Hamner NS Auto Mall Drive stop, approximately 320 feet south). The project site is located along a prominent corridor (Hamner Avenue) adjacent to existing residential, commercial, and institutional uses in the City of Norco. The project site is well situated to support vehicular, pedestrian, and equestrian access on Hamner Avenue and Third Street. The project includes development of an equestrian trail along the frontage of Hamner Avenue and

Strategy/Action	Project Consistency
emissions.	Third Street to encourage alternative transportation and enhance the equestrian lifestyle of Norco. Therefore, the project would be consistent with this strategy.
Plan for growth around livable corridors. The Livable Corridors strategy seeks to create neighborhood retail nodes that would be walking and biking destinations by integrating three different planning components: 1. Transit improvements 2. Active transportation improvements (i.e., improved safety for walking and biking) 3. Land use policies that include the development of mixed-use retail centers at key nodes and better integrate different types of ritual uses.	**Consistent.** The project site would include a food garden with outdoor recreational amenities and an equestrian trail. The project site is adjacent to existing residential, commercial, and institutional uses. Most of the commercial uses are auto-centric (i.e., carwashes, auto shops, auto sales, etc.). The proposed food garden and hotel would provide commercial food options within walking distance of existing uses, which would reduce VMT. As stated above and in Section 2, the project includes development of an equestrian trail along the frontage of Hamner Avenue and Third Street to encourage alternative transportation and enhance the equestrian lifestyle of Norco. The proposed trail would connect to an existing trail along Hamner Avenue. Therefore, the project would be consistent with this strategy.
Provide more options for short trips. 38 percent of all trips in the SCAG region are less than three miles. The 2016 RTP/SCS provides two strategies to promote the use of active transport for short trips. Neighborhood Mobility Areas are meant to reduce short trips in a suburban setting, while "complete communities" support the creation of mixed-use districts in strategic growth areas and are applicable to an urban setting.	**Consistent.** Implementation of the project would promote the reduction in vehicle trips by providing new commercial food services and outdoor recreational amenities within walking distance from existing residential, commercial, and institutional uses. In addition, there are two bus stops within 1,000 feet of the project site, which allow for easy access to public transportation for employees and other customers. Therefore, the project would be consistent with this strategy.
Transit Initiatives	
Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or neighborhood electric vehicle or other ZEV options.	**Consistent.** There are two bus stops within 1,000 feet of the project site, which allow for easy access to public transportation for project customers, residents, and employees to reduce VMT. Therefore, the project would be consistent with this strategy.
Other Initiatives	
Reduce emissions resulting from a project through implementation of project features, project design, or other measures. Incorporate design measures to reduce energy consumption and increase use of renewable energy.	**Consistent.** The project would incorporate applicable energy- and water-efficiency design features, as described in Section 2, *Project Description*, to comply with 2019 Title 24 standards. The incorporation of such features, provision and use of EV charging parking spaces and bicycle racks, and use of the proposed equestrian trail would result in reduced emissions from resource (energy and water) use and alternative transportation use. Therefore, the project would be consistent with this strategy.

Source: SCAG 2016

WRCOG Climate Action Plan

Norco is a participating agency in the WRCOG Subregional CAP, which includes measures established to reduce GHGs in the region. Table 4.7-7 contains an evaluation of project consistency with applicable GHG reduction measures in the WRCOG Subregional CAP. As shown in Table 4.7-7, the project would be consistent with applicable GHG reduction measures and would not conflict with the WRCOG Subregional CAP. Therefore, project impacts would be less than significant.

Table 4.7-7 Project Consistency with WRCOG Subregional CAP

Measure	Consistent?
SR-2: California Building Energy Efficiency Standards (Title 24, Part 6)	**Consistent.** The project would comply with the most recent California Building Energy Efficiency Standards in Title 24, Part 6 as stated in Section 2, *Project Description*. Therefore, the project would be consistent with Measure SR-2.
SR-4: Home Energy Renovation Opportunity Loan (HERO) Commercial Program	**Consistent.** The project does not have established occupants for the proposed food garden or hotel buildings. Future tenants can choose to participate in this program and the project would not hinder implementation of the HERO Commercial Program. Therefore, the project would be consistent with Measure SR-4.
SR-5: Utility Programs	**Consistent.** The project does not have established occupants for the proposed food garden or hotel buildings. Future tenants can choose to participate in this program and the project would not hinder implementation of the commercial utilities programs. Therefore, the project would be consistent with Measure SR-5.
SR-12: Electric Vehicle Plan and Infrastructure	**Consistent.** As described in Section 2, *Project Description*, the project would include up to 17 parking spaces for EV charging for food garden patrons and hotel guests. Therefore, the project would be consistent with Measure SR-12.
SR-13: Construction and Demolition Waste Diversion	**Consistent.** The project would comply with AB 939 and City of Norco Municipal Code Chapter 16.05, which require 50 percent diversion of construction waste, as stated in Section 4.14, *Utilities and Service Systems*. Therefore, the project would be consistent with Measure SR-13.
SR-14: Water Conservation and Efficiency	**Consistent.** The proposed conceptual landscape plan (Appendix B) includes low-water use and/or drought tolerant plants and trees for the project site. Water-efficient irrigation systems and controllers would also be included for landscaped areas as part of the project. As stated in Section 2, *Project Description*, the project would include water conservation measures in accordance with CALGreen standards, such as low-flow plumbing fixtures. Therefore, the project would be consistent with Measure SR-14.
T-2: Bicycle Parking	**Consistent.** As stated in Section 2, *Project Description*, the project would comply with the City of Norco standards for bicycle parking and provide 15 anchored bicycle racks on site for use by project employees, food garden patrons, and hotel guests. Therefore, the project would be consistent with Measure T-2.
T-9: Mixed Use Development	**Consistent.** The project entails residential and commercial uses on a high-visibility site that is mostly vacant, adjacent to existing commercial, residential, and institutional uses. The proposed mixed-use project would provide 320 multi-family residential units, an 8,700-sf food garden with outdoor recreational amenities, a 120-room hotel, and an equestrian trail along the project frontages of Hamner Avenue and Third Street. Therefore, the project would be consistent with Measure T-9.
T-12: Limit Parking Requirements for New Development	**Consistent.** The project would comply with the City of Norco parking standards and provide a total of 866 parking spaces, of which, 76 spaces would be shared between patrons and guests of the residential and commercial uses. Therefore, the project would be consistent with Measure T-12.

Source: WRCOG 2014

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.7.4 Cumulative Impacts

Planned and pending projects in Norco and surrounding areas are listed in Table 3-1 in Section 3, *Environmental Setting*, and include residential, commercial, and industrial land uses.

The analysis GHG emissions is cumulative in nature, as emissions affect the accumulation of GHGs in the earth's atmosphere and since no single project can cause a discernible change to the climate. Climate change impacts are the result of incremental contributions from natural processes, and past and present human activities. GHG emissions cannot be defined by a geographic boundary and are part of a global issue regarding climate change. However, CEQA places a boundary on impact analysis; that is the State.

Each of the proposed developments would generate temporary GHG emissions from construction activities and long-term GHG emissions from vehicle trips, electrical and water use, and other sources during operational activities. Each cumulative project would complete a project-specific GHG assessment to determine its emissions contribution and to identify any project-specific mitigation measures to reduce project emissions. The GHG emissions threshold for each cumulative project may differ slightly depending on the applicability of a certified CAP, or calculation of locally-appropriate project-specific service threshold according CARB's recommendation. Projects that fall below provided GHG emissions thresholds are considered to have a less than significant impact, both individually and cumulatively.

Construction and operation of the project would not exceed any established GHG emissions thresholds or conflict with any applicable plans or policies relating to air quality or reduction of GHG emissions, as discussed in Impact GHG-1 and Impact GHG-2. Therefore, the project would have a less than significant cumulative impact.

4.8 Hazards and Hazardous Materials

This section analyzes the project's potential impacts associated with potential exposure to hazards and hazardous materials. This analysis contains a description of hazards and hazardous materials that may exist on site or impact the project; and addresses impacts related to hazardous materials use and transportation, the accidental release of hazardous materials, development on contaminated sites, air traffic hazards, and interference with emergency response and evacuation plans. Impacts associated with wildfire are addressed in Section 5.5, *Wildfire*.

The analysis is based on the Phase I Environmental Site Assessment (Phase I ESA) prepared by GeoTek, Inc. (2019) and is included as Appendix H. The Phase I ESA is based on information compiled from a review of historic aerial photographs and available historic information, a review of federal and State databases for hazardous or contaminated sites, and a site reconnaissance survey conducted on October 8, 2019.

4.8.1 Setting

a. Definitions

Hazardous Waste

The United States Environmental Protection Agency (USEPA) defines a "hazardous waste" as a substance that: (1) may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness, and (2) poses a substantial present or potential future hazard to human health or the environment when it is improperly treated, stored, transported, disposed of, or otherwise managed (40 Federal Code of Regulations (CFR) 261.10). Hazardous waste is also defined as ignitable, corrosive, explosive, or reactive and is identified by the USEPA by its form: solids, semi-solids, liquids, and gases. Producers of such wastes include private businesses and federal, State, and local government agencies. A material may also be classified as hazardous if it contains defined amounts of toxic chemicals. USEPA regulates the production and distribution of commercial and industrial chemicals to protect human health and the environment. USEPA also prepares and distributes information to inform the public about these chemicals and their effects, and provides guidance to manufacturers in pollution prevention measures, such as more efficient manufacturing processes and recycling used materials.

Hazard versus Risk

Public health is potentially at risk whenever hazardous materials have been used or where there could be exposure to such materials. Ecological communities, such as avian and terrestrial habitats and the aquatic environment, may be at risk, depending on the type of populations and locations relative to potential exposure sources. Important to the setting and analyses presented in this section are the concepts of the "hazard" of these materials and the "risk" they pose to human health and the ecological environment.

Exposure to some chemical substances may harm internal organs or systems in the human body, ranging from temporary effects to permanent disability or death. Aquatic, terrestrial, or avian species may be similarly adversely affected. Hazardous materials that result in adverse effects are generally considered toxic. However, chemical materials may be corrosive or react with other substances to form other hazardous materials, but they are not considered toxic because organs or

systems are not affected. Because toxic materials can result in adverse health effects, they are considered hazardous materials, but not all hazardous materials are necessarily toxic. For purposes of the information and analyses presented in this section, the terms hazardous substances and hazardous materials are used interchangeably and include materials that are considered toxic.

The risk to human health and the ecological environment is determined by the probability of exposure to a hazardous material and the severity of harm such exposure would pose. The likelihood and means of exposure, along with the inherent toxicity of a material, are used to determine the degree of risk to human health or the ecosystem. For example, a high probability of exposure to a low toxicity chemical would not necessarily pose an unacceptable human health or ecological risk, whereas a low probability of exposure to a very high toxicity chemical might. Various regulatory agencies, such as USEPA, California Environmental Protection Agency (CalEPA), State Water Resources Control Board, California Department of Toxic Substances Control (DTSC), and federal and State Occupational Safety and Health Administrations (OSHA) are responsible for developing and/or enforcing risk-based standards to protect the public and the environment.

b. Historic Uses

In order to construct the historic use of the project site and surrounding area, GeoTek, Inc. reviewed aerial photographs from 1931 through present day, topographic maps, building records, and other public record sources (Appendix H).

Based on readily available historic information, the project site appears to have been occupied with two to three residential structures and some outbuildings from at least 1931 to at least 1975. Several remnant concrete slabs can be observed since 1985. The RV sales lot can be observed beginning in 1989. The surrounding properties appear to historically have been vacant land or scattered residential structures from at least 1931 to at least 1967. The residential development to the south can be observed beginning in 1967. The commercial development to the east of Hamner Avenue can be observed beginning in 1985.

c. Hazardous Materials Searches

Standard Environmental Record Sources

A database search of public lists of sites that generate, store, treat, or dispose of hazardous material or sites for which a release or incident has occurred was completed for the project site with a one-quarter mile to one-mile buffer. Table 4.8-1 summarizes the federal and State environmental databases that were review for listed sites on and near the project site. As shown in Table 4.8-1 and discussed in the Phase I ESA (Appendix H), the project site is not included on any federal or State databases for hazardous waste or contaminated sites.

Table 4.8-1 Federally and State Listed Sites On and Near the Project Site

Environmental Database	Search Radius (mile)	Project Site	Adjacent	Total Sites Listed
USEPA – National Priorities List (NPL), including delisted NPL	1.0	0	0	0
USEPA – Superfund Enterprise Management System, including archived sites	0.5	0	0	1
USEPA – Resource Conservation and Recovery Act (RCRA), Corrective Action Facilities	1.0	0	0	0
USEPA – RCRA, Transportation, Storage, and Disposal Facilities	0.5	0	0	0
USEPA – RCRA Generators	Site and Adjacent	0	0	8
USEPA – Emergency Response Notification System	Site	0	N/A	0
Federal institutional control/engineering control registries	0.5	0	0	0
CalEPA – State Response Sites (Response, formerly Annual Work Plan and Bond Expenditure Plan)	1.0	0	0	0
CalEPA – EnviroStor Database	0.5	0	0	5
CalEPA – California Hazardous Materials Information Reporting System	Site	0	0	0
CalEPA – Solid Waste Fill/Landfill, Solid Waste Assessment Test/Waste Management Unit Database System and Recycling Facilities	0.5	0	0	1
CalEPA – Leaking Underground Storage Tanks	0.5	0	0	8
CalEPA – Underground Storage Tanks	Site and Adjacent	0	0	4
CalEPA – Spills, Leaks, Investigations & Cleanup Cost Recovery Listing	0.5	0	0	0
State institutional control/engineering control registries	Site	0	N/A	0
Local and/or Tribal databases	Up to 1.0	0	0	0
Drycleaners	0.25	0	0	0
Other databases	Up to 1.0	0	0	0
Unmappable facilities	Up to 1.0	0	0	6

Source: GeoTek, Inc. 2019 (Appendix H)

Site Reconnaissance Observations of Existing Conditions

GeoTek, Inc. conducted a reconnaissance survey on October 8, 2019 which included the project site and surrounding properties to visually assess current utilization and indications of potential surface contamination. The Phase I ESA confirms that the northeast portion of the project site is occupied by the Norco RV sales lot, which includes a propane tank, a pile of used tires, a tub of used oil and vehicle batteries by a storage shed, and other typical RV service materials (such as vehicle jacks, replacement parts, lubricants). The remainder of the project site is vacant with remnant foundations from previous uses. Visual evidence of other hazardous substances or wastes were not observed. There was no indication of major spills or leaks observed during the survey, and no pungent or acrid odors were observed to emanate from the project site (Appendix H).

The propane tank on the RV sales lot was observed to operate at standard pressure and temperature, and therefore not an environmental concern for the project site and existing operations. No evidence of underground storage tanks (such as vent pipes, fill pipes, regular-shaped depressions, etc.) were observed on the project site; it is assumed that the RV sales lot uses an on site effluent disposal system. Existing uses had no evidence of generating poly-chlorinated biphenyls (PCBs), and no other conditions of hazardous materials concern were observed on the project site.

4.8.2 Regulatory Setting

a. Federal

United States Environmental Protection Agency

USEPA is the agency primarily responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials. Applicable Federal regulations pertaining to hazardous materials are contained in the CFR Titles 29, 40, and 49. Hazardous materials, as listed in 49 CFR 172.101. The following laws govern the management of hazardous materials:

- RCRA (42 UUSC 6901 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (also called the Superfund Act) (42 USC 9601 et seq.), as amended by the Superfund Amendments and Reauthorization Act (1986)
- Toxic Substances Control Act (15 USC 2601 et seq.)

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. USEPA provides oversight and supervision for Federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976

These acts established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous wastes and waste generation. Among other things, the use of certain techniques for the disposal of some hazardous wastes was prohibited specifically by Hazardous and Solid Waste Act.

The Hazardous and Solid Waste Amendments of 1984 expanded the scope of RCRA and increased the level of detail in many of its provisions, reaffirming the regulation from generation to disposal and to prohibiting the use of certain techniques for hazardous waste disposal. The USEPA has largely delegated responsibility for implementing the RCRA program in California to the State, which implements this program through the California Hazardous Waste Control Law.

RCRA regulates landfill siting, design, operation, and closure for licensed landfills. In California, RCRA landfill requirements are delegated to the California Department of Resources Recycling and Recovery (CalRecycle).

Comprehensive Environmental Response, Compensation and Liability Act

This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Among other things, CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous substances at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled revision of the National Contingency Plan, which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List and in compliance with CERCLA.

U.S. Department of Transportation Hazardous Materials Transport Act (49 USC 5101)

The U.S. Department of Transportation, in conjunction with the USEPA, is responsible for enforcement and implementation of Federal laws and regulations pertaining to transportation of hazardous materials. The Hazardous Materials Transportation Act directs the U.S. Department of Transportation to establish criteria and regulations regarding the safe storage and transportation of hazardous materials. CFR 49, 171–180 and Title 13 California Code of Regulations (CCR), regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials. It requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazard materials requirements. Carriers are required to report accidental releases of hazardous materials to the U.S. Department of Transportation at the earliest practical moment. Other incidents that must be reported include deaths, injuries requiring hospitalization, and property damage exceeding $50,000. The California Highway Patrol and California Department of Transportation (Caltrans) are the State agencies with primary responsibility for enforcing federal and State regulations related to transportation within California. These agencies respond to hazardous materials transportation emergencies. Together, these agencies determine container types to be used and grant licenses to hazardous waste haulers for hazardous waste transportation on public roads.

Per- and polyfluoroalkyl Substances (PFAS) Action Plan

In February 2019, the USEPA published the PFAS Action Plan detailing the agency's ongoing short-term and long-term regulatory actions pertaining to PFAS detection, research, and remediation. The PFAS Action Plan describes measures the USEPA is pursuing to address PFAS contamination at the federal level, including development of a federal maximum contaminant level under the Safe Drinking Water Act for PFOA and PFOS, creating groundwater cleanup recommendations for

contaminated sites, and pursuing and supporting long-term research initiatives.[1] The Action Plan further notes that the USEPA has initiated the regulatory process for listing PFOA and PFOS as hazardous substances under CERCLA and is exploring the possibility of developing PFAS ambient water quality criteria for human health under the Clean Water Act Section 304(a) (USEPA 2019).

b. State

Department of Toxic Substances Control

As a department of the CalEPA, DTSC is the primary agency in California that regulates hazardous waste, oversees the cleanup of existing contamination, and identifies ways to reduce hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code.

DTSC also administers the California Hazardous Waste Control Law to regulate hazardous wastes. While the California Hazardous Waste Control Law is generally more stringent than RCRA, until the USEPA approves the California program, both State and federal laws apply in California. The California Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the State Water Resources Control Board (SWRCB), and CalRecycle to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the State; also referred to as the Cortese List. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before the lead agency accepts an application for any development project as complete, the applicant must consult these lists to determine if the site at issue is included.

If any soil is excavated from a site containing hazardous materials, it would be considered a hazardous waste if it exceeded specific criteria identified by the DTSC in Title 22, Division 4.5 Section 66261.10. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

Cal/Occupational Safety and Health Act

The Occupational Safety and Health Act of 1970 (CCR Title 8) is implemented by the Cal/OSHA, which is responsible for ensuring worker safety in the handling and use of chemicals in the workplace. In California, Cal/OSHA has primary responsibility to develop and enforce workplace safety regulations concerning the use of hazardous materials in the workplace, including requirements for employee safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire

[1] Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) are part of the larger group of chemicals that comprise PFAS. USEPA. 2017. Technical Fact Sheet – PFOS and PFOA. [online]: https://www.epa.gov/sites/production/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf. Accessed May 2020.

prevention plan preparation. For example, under Title 8 CCR 5194 (Hazard Communication Standard), construction workers must be informed about hazardous substances that may be encountered. Compliance with Injury Illness Prevention Program requirements (Title 8 CCR 3203) would ensure that workers are properly trained to recognize workplace hazards and to take appropriate steps to reduce potential risks due to such hazards. This would be relevant if previously unidentified contamination or buried hazards are encountered. If additional investigation or remediation is determined to be necessary, compliance with Cal/OSHA standards for hazardous waste operations (Title 8 CCR 5192) would be required for those individuals involved in the investigation or cleanup work. A Site Health and Safety Plan must be prepared prior to commencing any work at a contaminated site or involving disturbance of building materials containing hazardous substances, to protect workers from exposure to potential hazards. Cal/OSHA also enforces hazard communication program regulations, including procedures for identifying and labeling hazardous substances. It requires Material Safety Data Sheets to be available for employee information and training programs.

California Emergency Services Act

The California Emergency Services Act (Government Code Section 8550 et seq.) was adopted to establish the State's roles and responsibilities during human-made or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the State. This act is intended to protect health and safety by preserving the lives and property of the people of the State.

Assembly Bill 756

On July 31, 2019, California's governor signed into law Assembly Bill (AB) 756, the State's premier regulatory response to PFAS contamination. Effective January 1, 2020, AB 756 authorizes SWRCB to require monitoring and reporting of detectable PFAS levels in drinking water supplies. The law establishes tiers of PFAS notification and response, including publication of any detectable levels of PFAS in the public water system's Consumer Confidence Report. A public water system detecting PFAS in excess of established notification levels—5.1 parts per trillion (ppt) for PFOA and 6.5 ppt for PFOS—must provide notification within 30 days to its governing body and, if applicable, the California Public Utilities Commission, pursuant to Section 116455 of the California Health and Safety Code. Public water systems detecting PFAS in excess of the 70-ppt response level must either remove the water source from use or comply with more stringent notification requirements, including notification to consumers via mail/direct delivery, e-mail, website, and newspaper notices (Aleshire & Wynder LLP 2019; SWRCB 2019).

In advance of AB 756 taking effect, the SWRCB announced updated PFAS detection and reporting guidelines for local water agencies in August 2019. Furthermore, the SWRCB announced that it had requested the Office of Environmental Health Hazard Assessment develop a public health goal for PFAS, an initial step toward establishing a regulatory maximum contaminant level for PFAS in drinking water.

c. Regional

Riverside County Emergency Operations Plan

The Riverside County Emergency Operations Plan (EOP) serves as the foundation for response and recovery operations for Riverside County, and establishes the roles and responsibilities, assigns tasks, and specifies policies and general procedures. The EOP assists with facilitating an effective response to any emergency by providing a platform that encourages collaboration between the Riverside County Operational Area Emergency Operations Center, first responders, and support agencies. The City of Norco is included in the County's operational area.

Airport Land Use Compatibility Plans

The Section 65302.3 of the Government Code requires general plans and applicable specific plans to be consistent with amended Comprehensive Airport Land Use Plans. The Riverside County Airport Land Use Commission (ALUC) governs 16 airports in Riverside County by implementing the *Riverside County Airport Land Use Compatibility Plan Policy Document*, which establishes policies and compatibility maps for each of the 16 individual airports potentially affecting land use within Riverside County (Riverside County ALUC 2004).

Corona Municipal Airport Land Use Compatibility Plan

The Corona Municipal Airport Land Use Compatibility Plan (ALUCP) reduces potential conflict between the Airport and surrounding land uses by providing guidance to affected local jurisdictions regarding airport land use compatibility matters. The main objective of the ALUCP is to avoid future compatibility conflicts rather than to remedy existing incompatibilities. The ALUCP does not place any restrictions on the present and future role, configuration, or use of the airport. The Corona Municipal Airport is located nearest to the project site, approximately 2.3 miles southwest. The project site is not located in the Corona Municipal Airport compatibility zone or influence area.

d. Local

City of Norco General Plan

The City of Norco General Plan Safety Element contains citywide goals and policies to prevent the loss of life and property, and to minimize injuries and property damage in the event of hazards such as floods, fires, earthquakes, landslides, and other hazards. Policy 2.8.1a is relevant to the project, and states, "For businesses or individuals involved in the use of hazardous materials require proof of compliance with all jurisdictional agencies (federal, State, and local) prior to issuance or renewal of a business license."

City of Norco Local Hazard Mitigation Plan

The City's Local Hazard Mitigation Plan (LHMP) identifies the City's hazards, reviews and assesses past disaster events, estimates the probability of future occurrences, and sets goals to mitigate potential risks to reduce or eliminate long-term risks to people and property from natural and man-made hazards. The LHMP states that there is the potential for hazardous material spills or fires that may occur as a result of motor vehicle accidents. However, the City adheres and enforces Norco Municipal Code and the 2016 California Fire Code. The types and quantities of hazardous materials are constantly being reviewed and/or evaluated for potential risks through the

enforcement of existing Fire Inspections, Code Enforcement Investigations and Building Code requirements.

4.8.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states hazards or hazardous materials effects of the project would be significant if project would:

a significant impact would occur if implementation of the project would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
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;
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

b. Methodology

The following discussion evaluates potential project impacts related to hazards and hazardous materials considers both direct effects to the resource and indirect effects in a local or regional context. Potentially significant impacts would generally result in the loss or degradation of public health and safety or conflict with local, State, or federal agency regulations. The discussion is based on the project-specific Phase I ESA (Appendix H).

c. Impact Analysis and Mitigation Measure

Threshold 1:	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
Threshold 2:	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact HAZ-1 THE PROJECT ENTAILS RESIDENTIAL AND COMMERCIAL USES THAT WOULD NOT ROUTINELY TRANSPORT, USE, OR DISPOSE OF HAZARDOUS MATERIALS NOR RESULT IN THE ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project entails mixed-use development that includes 320 residential dwelling units, a food garden with outdoor recreational amenities, and a 120-room hotel. No manufacturing, industrial, or mining uses proposed as part of the project. Proposed uses would not entail operations that require routine transportation, use, or disposal of hazardous materials nor would potentially result in the accidental release of hazardous materials.

Potential hazardous materials, such as paint products, fuel, lubricants, solvents, and cleaning products, may be used and/or stored on site during project construction. However, due to the limited quantities of these materials to be used by the project, they are not considered hazardous to the public at large. Limited quantities of paint and household and commercial cleaning products would be used and stored on site during project operation by future residents, property management, and hotel management. The transport, use, and storage of hazardous materials during the construction and operation of the site would be conducted pursuant to all applicable local, State, and federal laws, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the CCR, which describes strict regulations for the safe transportation of hazardous materials, and in cooperation with the County's Department of Environmental Health. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation]

Impacts would be less than significant without mitigation.

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

Impact HAZ-2 THE PROJECT SITE IS LOCATED WITHIN A ONE-QUARTER MILE OF THE JOHN F. KENNEDY MIDDLE COLLEGE HIGH SCHOOL. HOWEVER, PROPOSED USES WOULD NOT GENERATE HAZARDOUS EMISSIONS OR WASTE, OR HANDLE HAZARDOUS MATERIALS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project site is located in the Corona-Norco Unified School District (CNUSD). The Norco College STEM Center and Headstart Preschool (1900 Third Street) are located adjacent to the west of the project site. The John F. Kennedy Middle College High School (1951 Third Street) is located

approximately 550 feet west of the project site. Cumulative projects are listed in Table 3-1 in Section 3, *Environmental Setting*, and include residential, commercial, and industrial uses; there are no schools proposed within a one-quarter mile of the project site.

As stated above, proposed uses would not entail operations that require routine transportation, use, or disposal of hazardous materials nor would potentially result in the accidental release of hazardous materials. Limited quantities of paint and household and commercial cleaning products would be used and stored on site during project operation by future residents, property management, and hotel management. Such materials used during project operation would not be used in quantities great enough to be considered hazardous or acutely hazardous. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation]

Impacts would be less than significant without mitigation.

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

Impact HAZ-3 THE PROJECT SITE AND ADJACENT PROPERTIES ARE NOT LISTED ON ANY STATE OR FEDERAL LISTS FOR HAZARDOUS MATERIALS OR CONTAMINATED SITES. PROPOSED RESIDENTIAL AND COMMERCIAL USES WOULD NOT USE HAZARDOUS MATERIALS, CREATE SIGNIFICANT HAZARDS, NOR GENERATE HAZARDOUS WASTES. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

The Phase I ESA prepared for the project (Appendix H) included State (Cortese list) and federal database searches for listed sites within a one-quarter mile and up to one-mile buffer from the project site. As summarized in Table 4.8-1, there are no hazardous materials sites identified on the project site and adjacent sites. The latest review of the of the State PFAS Drinking Water System Quarterly Testing Results and the PFAS Non-Drinking Water Investigation Site maps, completed on May 18, 2020, show no PFAS contamination or investigation sites in the City of Norco or on the project site (SWRCB 2020a and 2020b).

Historic uses on the site include residential buildings since 1931 to at least 1975. These residential buildings were since demolished, and the RV sales lot can be observed in historic aerials since 1989 with the remainder of the project site laying vacant. The Phase I ESA concludes that no significant data gaps were encountered, and that there is no evidence of an environmental condition or concern for the project site and its proposed uses.

As stated above, proposed uses would not entail operations that require routine transportation, use, or disposal of hazardous materials nor would potentially result in the accidental release of hazardous materials. Limited quantities of paint and household and commercial cleaning products would be used and stored on site during project operation by future residents, property management, and hotel management. Such materials used during project operation would not be used in quantities great enough to be considered hazardous or acutely hazardous. Therefore, the project would have no impact.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation]

The project would have no impact and does not require mitigation measure, as stated above.

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

Impact HAZ-4 THE PROJECT SITE IS NOT LOCATED IN THE CORONA MUNICIPAL AIRPORT LAND USE COMPATIBILITY ZONE OR INFLUENCE AREA. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

The Corona Municipal Airport is located nearest to the project site, approximately 2.3 miles southwest. The project site is not located in the Corona Municipal Airport compatibility zone or influence area (Riverside County ALUC 2004). Therefore, the project would have no impact.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation]

The project would have no impact and does not require mitigation measure, as stated above.

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

Impact HAZ-5 PROJECT CONSTRUCTION ACTIVITIES WOULD NOT REQUIRE ROADWAY CLOSURES OR DETOURS; AND PROJECT OPERATION WOULD ENSURE MAINTENANCE OF ADEQUATE SITE ACCESS FOR EMERGENCY VEHICLES. THE PROJECT WOULD NOT RESULT IN A ROADWAY CHANGE THAT WOULD INTERFERE WITH THE IMPLEMENTATION OF ADOPTED EMERGENCY RESPONSE OR EVACUATION PLANS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The Riverside County Fire Department (RCFD) and Riverside County Sheriff's Department (RCSD) are responsible for coordinating emergency responses for the City and project site, as stated in Section 4.12, *Public Services*. The City's LHMP includes mitigation strategies to limit the loss of life and property during emergencies and natural hazard events by achieving objectives such as improving community transportation corridors to allow for better evacuation routes for public and better access for emergency responders (City of Norco 2017).

Equipment and supply staging and storage during project construction would be located on the project site. Roadway closures or restrictions would not be required during project construction activities. Therefore, project construction activities would not physically interfere with emergency access to the project site or vicinity, nor implementation of the City's LHMP. Therefore, project construction impacts on emergency access would be less than significant.

As stated in Section 2, *Project Description*, the project would include two driveways to access the site from Third Street and Hamner Avenue. Proposed project and site circulation plans would be

reviewed by the City and RCFD to ensure adequate widths for emergency vehicle access and turns during final project review, prior to issuance of building permits. Project residents would be required comply with all signage placed in proposed parking areas, intended to maintain adequate access for emergency vehicles, by preventing parallel parking on site along designated vehicle circulation areas, as required and verified by the City and the RCFD. The project would not result in physical alterations of existing roadways that would interfere with the implementation of adopted emergency response or evacuation plans. Therefore, project operational impacts on emergency access to the project site, and existing emergency response and evacuation plans would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation]

Impacts would be less than significant without mitigation.

Threshold 7:	Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Impact HAZ-6 THE PROJECT SITE IS NOT LOCATED IN A VERY HIGH FIRE HAZARD SEVERITY ZONE NOR NEAR AREAS OF THE CITY WITH WILDFIRE POTENTIAL. THE PROJECT ENTAILS DEVELOPMENT OF MIXED RESIDENTIAL AND COMMERCIAL USES THAT WOULD NOT DIRECTLY OR INDIRECTLY EXPOSE PEOPLE OR STRUCTURES TO WILDFIRE RISKS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Wildfire risks and impacts are addressed in Section 5.5, *Wildfire*. The project site is not located in or near a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2009; City of Norco 2013). The project site is located approximately 1.3 miles west of the nearest VHFHSZ at the western base of Norco Hills. Areas of greatest wildfire potential are located on the eastern edge of the City and areas of moderate potential are located on the southeastern and northern areas of the City. According to the General Plan Safety Element, the greatest areas of wildfire threat are in undeveloped and open areas, particularly those with steep slopes and dry vegetation (City of Norco 2013).

The project would include installation of on site and off-site drainage facilities and would not result in wildfire risks or risks related to downslope or downstream flooding or landslides subsequent to wildfire events. Therefore, project impacts related to wildfire risks would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation]

Impacts would be less than significant without mitigation.

4.8.4 Cumulative Impacts

Currently planned and pending projects in Norco and surrounding areas, including the City of Eastvale and the City of Corona, are listed in Table 3-1 in Section 3, *Environmental Setting.* Cumulative projects may have the potential to expose future area residents, employees, and visitors to hazardous materials during project construction and operation of proposed residential,

commercial, and industrial uses. The severity of potential hazards for individual projects depends on the location, type, and size of development and the specific hazards associated with individual project sites. All hazardous materials users, transporters, waste generators, and disposers are subject to federal and State regulations that require proper transport, handling, use, storage, and disposal of such materials to ensure public safety.

If hazardous materials are present on proposed or future project sites, each project applicant and/or property owner would be required to implement remediation activities pursuant to federal, State, and regional regulations pertaining to the specific contaminant(s) found on the sites; each site would be remediated to a level sufficient for proposed uses prior to project construction.

As discussed above and in the Phase I ESA (Appendix H), the project site does not contain hazardous materials or waste and is not listed on any federal or State databases for contaminated sites. Proposed project uses include residential and commercial uses, which would result in the use and storage of limited quantities of paint and household and commercial cleaning products by future residents, property management, and hotel management.

Potential impacts related to hazards and hazardous materials would be assessed on a project-specific level due to the site-specific nature of contaminated sites. Therefore, compliance with the relevant federal, State, and local regulations during the construction and operation of related projects would ensure that cumulative impacts from hazardous materials would be less than significant.

4.9 Hydrology and Water Quality

This section analyzes the project's potential impacts on water quality and hydrological resources. The analysis contains a description of the hydrologic and water quality setting for the project site, the regulatory setting for water quality management, and a discussion of potential temporary impacts relating to construction activity and potential long-term impacts associated with project operation.

The analysis is based on the Preliminary Hydrology Study prepared by Fuscoe Engineering, Inc. (2020a) which is included as Appendix I, the Preliminary Project-Specific Water Quality Management Plan (WQMP) prepared by Fuscoe Engineering, Inc. (2020b) which is included as Appendix J, and the Geotechnical Evaluation prepared by GeoTek, Inc. (2019) which is included as Appendix G. The Preliminary Hydrology Study and WQMP are based on information compiled through review of local hydrology, existing and proposed drainage systems, and performance calculations of the proposed drainage system.

4.9.1 Setting

a. Existing Hydrologic and Water Quality Setting

The project site is in the Santa Ana River Hydrologic Unit in the South Coast Hydrologic Region (U.S. Geological Survey [USGS] 2018; California Department of Water Resources [DWR] 2016). Within the Santa Ana River Hydrologic Unit, the project site is in the Temescal Wash (Temescal Creek) subwatershed (Hydrologic Unit Code 1807020306). The Santa Ana Regional Water Quality Control Board (SARWQCB) governs basin planning and water quality in the Santa Ana River Hydrologic Unit. The cities within the Temescal Wash subwatershed include Corona, Lake Elsinore, Norco, and Riverside.

The climate in Norco is typical of southern California, with generally mild temperatures, minimal days below freezing, and approximately 330 days of sunshine per year. The City's average monthly temperature ranges from 48.3 degrees Fahrenheit (°F) to 78.2°F, with an annual average temperature of 63.3°F. The daily extreme low and high temperatures have been measured to be 22°F and 118°F, respectively. Evapotranspiration averages a total of 56.4 inches per year. The City has a historic average annual precipitation of approximately 12.7 inches. Most rainfall typically occurs from November through April (City of Norco 2016).

Surface Water Resources and Drainage

The 19.1-acre project site is mostly undeveloped. The northeastern portion of the project site, at the southwest corner of the Third Street and Hamner Avenue intersection, is currently in use as a recreational vehicle (RV) sales lot. As described in Section 4.3, *Biological Resources*, no potentially jurisdictional drainage features are present on the site. The project site is underlain by moderately well-drained soils, and no potential wetlands or vernal pools have been identified on the site. The concrete-lined North Norco Channel is located adjacent to the southern boundary of the project site and separated from the site by a chain-link fence.

Currently, stormwater on the project site flows from higher elevations in the middle section of the project site approximately 640 feet above mean sea level (amsl) to lower elevations in the outer edges of the project site, approximately 603 feet amsl at the lowest point on the eastern side

towards Hamner Avenue, 626 feet amsl on the northern side near Third Street, 615 amsl on the western side of the project site, and 610 amsl on the southern side (Appendix I).

Given the higher elevations in the middle of the site, site drainage presently consists of sheet flow partially to the north into Third Street, partially to the east into Hamner Avenue, and predominantly to the south into the North Norco Channel. Flows along Third Street and Hamner Avenue ultimately drain to North Norco Channel as well. The site also receives runoff from an approximately 4.4-acre area of land to the northwest, which flows southeasterly through the site to the North Norco Channel.

North Norco Channel is a tributary to Temescal Wash (Temescal Creek), which extends approximately 28 miles from Lake Elsinore to the Santa Ana River. Temescal Wash meets the Santa Ana River in the Prado Basin Management Zone, a flood plain wetland area created behind Prado Dam. North Norco Channel discharges to Temescal Wash near its confluence with the Santa Ana River within the Prado Basin Management Zone. Figure 4.9-1 shows surface water resources near the project site and nearby surface water flowlines as delineated in the United States Geological Survey's (USGS) National Hydrography Dataset.

Groundwater Resources

The project site is underlain by the 240-square mile Upper Santa Ana Valley Groundwater Basin, Temescal Subbasin (Groundwater Basin Number 8-2.09). The Temescal Subbasin spans 37 square miles, mostly in the cities of Norco and Corona, with groundwater stored primarily in Holocene alluvial deposits (DWR 2006). Figure 4.9-2 shows the boundaries of the Temescal Subbasin and other nearby groundwater basins in relation to the project site.

The Temescal Subbasin underlies the southwest part of upper Santa Ana Valley. On the north, the subbasin is bounded by the Chino Subbasin, marked by the Santa Ana River and a set of low hills of crystalline rock near Norco. The eastern part of the subbasin is bounded by nonwater-bearing crystalline rocks of the El Sobrante de San Jacinto and La Sierra Hills. The subbasin is bounded on the west by the Santa Ana Mountains and the south by the Elsinore Groundwater Basin at a constriction in the alluvium of Temescal Wash. Average annual precipitation ranges from 14 to 16 inches per year. Dominant recharge to the groundwater reservoir is from percolation of precipitation on the valley floor and infiltration of stream flow within tributaries exiting the surrounding mountains and hills. Groundwater flows toward the center of the Temescal Subbasin and then northeast toward the Santa Ana River (City of Norco 2016).

The San Bernardino Valley Municipal Water District and Western Municipal Water District provide wholesale and retail water supplies, including groundwater, in the areas that overlay the Riverside-Arlington and Temescal Subbasins. The Temescal Subbasin is not adjudicated and is listed as a Sustainable Groundwater Management Act (SGMA) medium priority basin and, therefore, required to submit a groundwater sustainability plan (GSP) by January 31, 2022 (DWR 2019). In March 2017, the City of Corona Department of Water and Power, City of Norco, and Home Gardens County Water District adopted a Memorandum of Understanding forming a Groundwater Sustainability Agency (GSA) to comply with the requirements of SGMA.

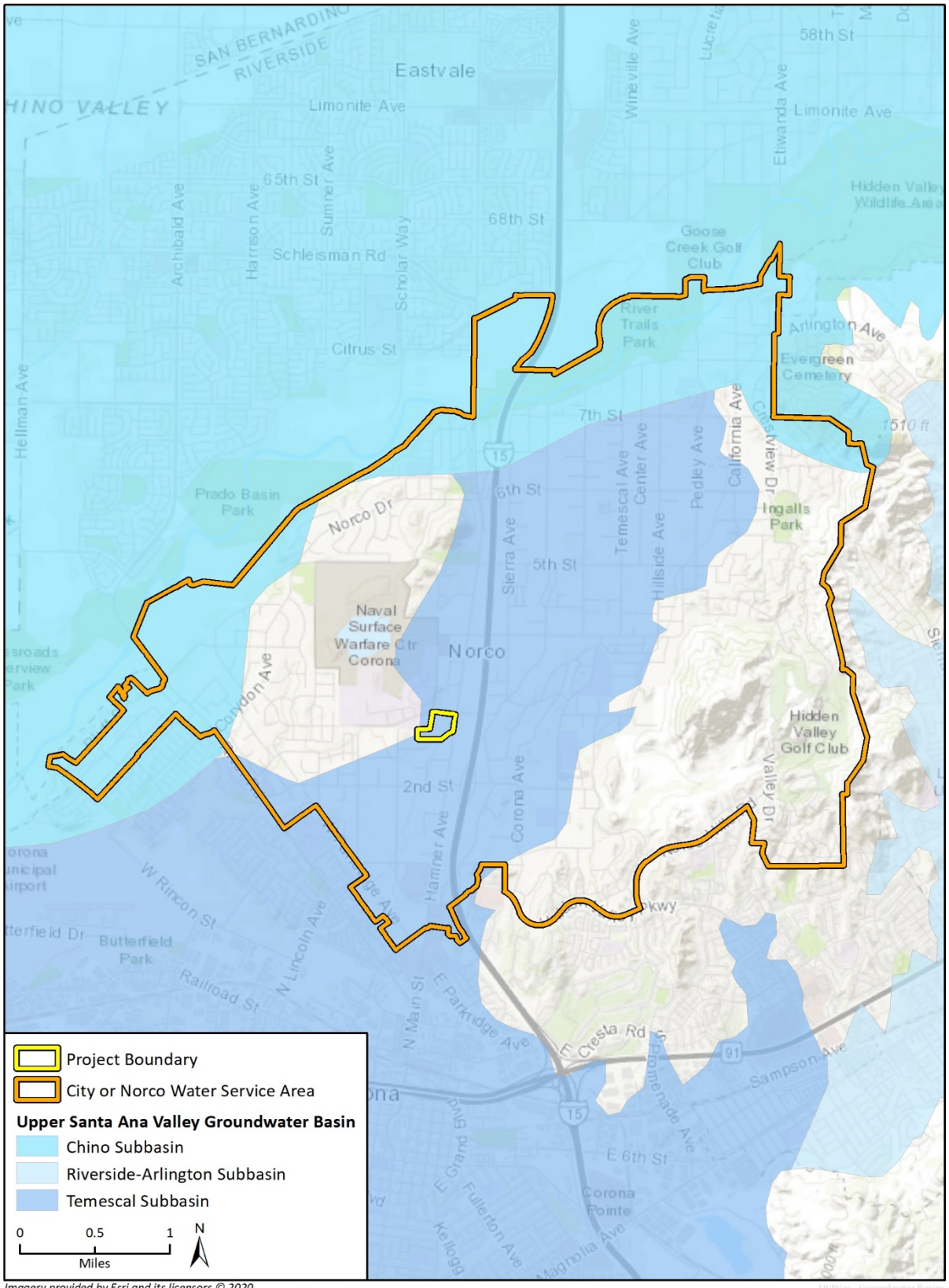
The City of Norco pumps groundwater from the Temescal Subbasin from four active groundwater wells. Groundwater quality from these wells typically does not meet the U.S. Environmental Protection Agency (USEPA) and Division of Drinking Water maximum contaminant levels for fluoride, arsenic, and secondary standards for iron and manganese (City of Norco 2016). The groundwater is characterized as calcium-sodium bicarbonate with moderate to high total dissolved

Figure 4.9-1 Surface Waters

Imagery provided by Microsoft Bing and its licensors © 2020. Data source National Hydrography Dataset.

Fig X Surface Waters Near the Project Site

Figure 4.9-2 Groundwater Subbasins



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Additional data provided by Riverside County, 2020 and California Department of Water Resources, 2020

solids and nitrates, and localized areas with high volatile organic compounds, perchlorate, iron, and manganese. The City of Norco operates a groundwater treatment plant to reduce iron, manganese, and hydrogen sulfide concentrations (Norco n.d.).

Seepage or perched groundwater was encountered in soil borings collected during the geotechnical investigation. Groundwater was encountered in the southwestern portion of the project site, near the North Norco Channel. Groundwater was not encountered at any other boring locations to depths of 15 to 23 feet below ground surface (bgs). It is possible that seasonal variations (temperature, rainfall, etc.) will cause fluctuations in the groundwater level. Additionally, perched water may be encountered at shallow depths following extensive rain events (GeoTek, Inc. 2019).

There are 20 public supply wells in the Temescal Subbasin, including the four operated by the City of Norco. Total groundwater production exceeded 15,000 acre-feet per year (AFY) in the Temescal Subbasin from 1951 to 1978 in support of agricultural irrigation, with peak production occurring from 1959 through 1964. Production declined to below 10,000 AFY by 1979 and averaged about 9,419 AFY through the mid-1990s. During this time, agricultural pumping had significantly declined, but municipal pumping had not yet increased. Since 2002, pumping has exceeded 20,000 AFY for the first time since the 1960s peak irrigation totals (City of Norco 2016). Table 4.9-1 presents recorded depths to groundwater on and near the project site within the Temescal Subbasin.

Table 4.9-1 Depth to Groundwater in the Temescal Subbasin

Site	Local Well ID	Distance from Project Site	Depth to Groundwater (bgs)[1]	Date of Measurement[2]
Project Site				
Boring B-6[3]	N/A	On site	27.5	October 15, 2019
Nearby Wells				
Well Site Code: 338940N1175929W001	Butterfield Well	2.2 miles (southwest)	28.6	October 13, 2017
Well Site Code: 338761N1175569W001	Park Well	2.4 miles (south)	103.0	November 30, 2012
Well Site Code: 338729N1175842W001	Joy Street Well	3.1 miles (southwest)	196.2	April 10, 2020

[1]bgs = below ground surface (in feet)

[2]The most recent available groundwater level measurement available was used.

[3]This data point reflects the only soil boring to encounter groundwater on the project site during preparation of the geotechnical study.

Sources: GeoTek, Inc. 2019 (Appendix G); DWR 2018a

Water Quality

The primary sources of surface and groundwater pollution enter the water system via stormwater runoff from paved areas. This urban runoff can contain hydrocarbons, sediments, pesticides, herbicides, toxic metals, and coliform bacteria. Leaking septic tanks can cause similar types of contamination. Illegal waste dumping can introduce contaminants such as gasoline, pesticides, herbicides, and other harmful chemicals.

There are two major classes of pollutants: point source and non-point source. Point source pollutants can be traced to their original source and are discharged directly from pipes or spills. Raw sewage discharging directly into a stream is an example of a point-source water pollutant. Non-point source pollutants are diffuse and cannot be traced to a specific original source. Non-point source pollution is caused by precipitation runoff collecting natural and human-made pollutants before depositing them into various watersheds, including lakes, rivers, wetlands, coastal waters, and groundwater. Non-point source pollutants include, but are not limited to:

- Excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas;
- Oil, grease, and toxic chemicals from urban runoff;
- Sediment from improperly managed construction sites, crop and forest lands, and eroding stream banks;
- Salt from irrigation practices; and
- Bacteria and nutrients from livestock, pet wastes, and faulty septic systems (USEPA 2018).

The project site is in the Temescal Wash (Temescal Creek) subwatershed of the Santa Ana River watershed. The North Norco Channel discharges to Temescal Wash within the Prado Basin Management Zone, where it then flows into the Santa Ana River (Reach 3). The SARWQCB develops water quality standards for surface waters in the Santa Ana River watershed to fulfill designated beneficial uses of the water bodies. Water bodies that fail to meet these standards are listed as impaired, and a total maximum daily load (TMDL) limit may be required to allocate the maximum pollutant load the water body may receive and still meet its water quality standards. The Santa Ana River (Reach 3) and Prado Basin Management Zone are listed as impaired on the 2014/2016 California 303(d) list and have an Integrated Report category of five, indicating water quality standards are not met and a TMDL is required but not yet completed for at least one of the pollutants listed for these water bodies (State Water Resources Control Board [SWRCB] 2019). Designated beneficial uses and impairments for water bodies downstream of the North Norco Channel are summarized in Table 4.9-2.

Table 4.9-2 Impairment Status of Downstream Surface Waters

Water Body	Designated Beneficial Uses	Impairments	Integrated Report Category
Prado Basin Management Zone	Water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, Rare, Threatened or Endangered species	pH	Category 5
Santa Ana River (Reach 3)	Agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, Rare, Threatened or Endangered species, spawning, reproduction and development	Copper (TMDL required) Lead (TMDL required) Indicator bacteria (TMDL approved)	Category 5
Santa Ana River (Reach 2)	Agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, Rare, Threatened or Endangered species, spawning, reproduction and development	None	Category 1
Santa Ana River (Reach 1)	Water contact recreation, non-contact water recreation, warm freshwater habitat (intermittent), wildlife habitat (intermittent)	None	Category 1

Category 1 Criteria: A water that fully supports at least one of its California beneficial uses, has other uses that are not assessed or lack sufficient information to be assessed, and for which no assessed uses are not supported.

Category 5 Criteria: A water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment.

Note: Pursuant to the Clean Water Act section 303(d), each State is required to submit to the USEPA a list identifying water bodies not meeting water quality standards. The water bodies listed in this table with Categories 1-5 are on California's 2014/2016 303(d) list for the pollutants indicated.

Source: SWRCB 2019; SARWQCB 2019

b. Flooding and Other Potential Hazards

Norco is naturally insulated against extensive, serious flooding from the Santa Ana River by a slope gradient that exists along the south bank of the river. In the event of a 100-year storm, the only areas likely to flood would be limited to the Silver Lakes Equestrian Center located in the north side of the City, a portion of the Santa Ana Riverbed along the west border, and small pockets of land around the City's flood control channels (City of Norco 2017). The project site is located in Zone X, an area of minimal flood hazard designated by the Federal Emergency Management Agency (FEMA) (FEMA 2008).

The project site is approximately 30 miles east from the Pacific Ocean. No substantial bodies of water pose seiche or tsunami risks to the project site. Mudflows are commonly associated with landslide risks, and the project site has no identified landslide risks that could trigger mudflows (GeoTek Inc. 2019).

4.9.2 Regulatory Setting

a. Federal

Clean Water Act

Congress enacted the Clean Water Act (CWA), formally the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the U.S. The CWA requires States to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). SWRCB and its nine Regional Water Quality Control Boards (RWQCB) administer NPDES permitting authority. The project site is under the jurisdiction of the RWQCB Region 8 (Santa Ana Region, SARWQCB).

Section 401 of the CWA requires that the RWQCB certify any activity that may result in discharges into a State water body. This certification indicates the proposed activity does not violate federal and/or State water quality standards. The limits of non-tidal waters extend to the Ordinary High Water Mark, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. The United States Army Corps of Engineers may issue either individual, site-specific permits or general, nationwide permits for discharge into waters of the U.S. Section 303(d) of the CWA (CWA, 33 USC 1250, et seq., at 1313(d)) requires States to identify "impaired" water bodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the USEPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, States must prioritize waters and watersheds for future development of TMDLs. The SWRCB and RWQCBs enact ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements.

National Pollutant Discharge Elimination System

The primary regulatory control relevant to the protection of water quality is the NPDES permit administered by the SWRCB. The SWRCB establishes requirements prescribing the quality of point sources of discharge and water quality objectives. These objectives are established based on the designated beneficial uses (e.g., water supply, recreation, and habitat) for a particular surface water body. The NPDES permits are issued to point source dischargers of pollutants to surface waters pursuant to Water Code Chapter 5.5, which implements the federal CWA. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (SWRCB, Title 23, Chapter 9, Section 2200). The RWQCB establishes and regulates discharge limits under the NPDES permits.

b. State

Porter-Cologne Water Quality Control Act

The SWRCB regulates water quality through the Porter-Cologne Water Quality Control Act of 1969, which contains a complete framework for the regulation of waste discharges to both surface waters and groundwater of the State. RWQCBs regulate stormwater quality under authorities of the federal CWA and the State Porter-Cologne Water Quality Control Act.

NPDES Statewide Construction General Permit

Construction projects that disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). To obtain coverage under the Construction General Permit, a project-specific Stormwater Pollution Prevention Plan (SWPPP) must be prepared. The SWPPP outlines best management practices (BMP) to reduce stormwater and non-stormwater pollutant discharges including erosion control, minimizing contact between construction materials and precipitation, and implementation of strategies to prevent equipment leakage or spills.

Sustainable Groundwater Management Act

In September 2014, the governor signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. SGMA gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins, as defined by DWR.

The project site overlies the Temescal Subbasin. As a non-adjudicated, medium priority groundwater basin, the Temescal Subbasin is required to prepare a GSP pursuant to the requirements of SGMA. The City of Corona Department of Water and Power, City of Norco, and Home Gardens County Water District have entered a Memorandum of Understanding (MOU) to establish the Temescal Subbasin Groundwater Sustainability Agency (Temescal GSA). Through the MOU, the City of Corona has accepted the primary responsibility to develop a GSP for the Temescal Subbasin. Corona will lead the preparation of a GSP for the subbasin that will include outreach to stakeholders, creation of data management system for geographic information system (GIS) mapping and other relevant data sets (e.g., soils, land use, climate), water resources monitoring program preparation (e.g., groundwater levels, pumping, quality), groundwater analyses and maps of historical/current conditions (e.g., change in groundwater storage), groundwater quality assessment, groundwater budget assessment and quantification, numerical groundwater flow model review, possible improvement, and application, and consideration of management issues, objectives, and activities consistent with SGMA (DWR 2018b).

c. Local

Water Quality Control Plan for the Santa Ana River Basin (Basin Plan)

Norco is under the jurisdiction of RWQCB Region 8, the SARWQCB, which provides permits for projects that may affect surface waters and groundwater locally and is responsible to prepare the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). The Basin Plan designates beneficial uses of waters in the region and establishes narrative and numerical water quality objectives. Water quality objectives, as defined by the CWA Section 13050(h), are the "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." California has developed TMDLs, which are a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality objectives established by the region. The Basin Plan serves as the basis for the SARWQCB's regulatory programs and incorporates an implementation plan to meet water quality objectives. Basin Plans undergo a triennial review process, with the SARWQCB's Basin Plan most recently updated in June 2019 (SARWQCB 2019).

Municipal Regional Stormwater NPDES Permit

On January 29, 2010, the SARWQCB adopted Order R8-2010-0033, as amended by Order R8-2013-0024 (NPDES Permit and Waste Discharge Requirements for the RCFCD, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region) otherwise known as the municipal separate storm sewer system (MS4) permit. Norco was added as a co-permittee under the Riverside County MS4 permit in the 2013 amendment. One component of the MS4 permit requires the development of site-specific WQMPs for new development and significant redevelopment projects. WQMPs include site design, source control, and treatment elements to reduce stormwater pollution from urban runoff.

On April 7, 2015, the SARWQCB adopted statewide Trash Provisions to address impacts of trash on surface waters in the region. The Trash Provisions outline additional requirements for co-permittees under the MS4 permit, including either installation of Full Capture Systems for all storm drains capturing runoff from priority land uses, or a combination of full capture systems, multi-benefit projects, treatment controls, and/or institutional controls to reduce trash accumulation in surface waters (SARWQCB 2018).

Riverside County Drainage Area Management Plan

The Riverside County Drainage Area Management Plan (DAMP), developed by the Riverside County Flood Control and Water Conservation District (RCFCWCD) and other co-permittees to the MS4 Permit, outlines programs and policies to manage urban runoff (Riverside County 2017a). The DAMP includes development review procedures for co-permittees, required construction BMPs and inspection frequency, annual reporting and evaluation framework, and TMDL implementation strategies. The DAMP is the primary document outlining compliance procedures for co-permittees to adhere to the requirements of the MS4 Permit in Riverside County.

Riverside County Watershed Action Plan

The Riverside County Watershed Action Plan is intended to enable co-permittees under the Riverside County MS4 Permit to address watershed-level water quality impacts associated with urbanization (Riverside County 2017b). The Watershed Action Plan describes the Santa Ana Watershed, applicable MS4 programs (e.g., the DAMP, WQMPs), and the development review process for new development and redevelopment projects.

Design Handbook for Low Impact Development Best Management Practices

Developed in 2011 by the RCFCWCD, the Design Handbook for Low Impact Development Best Management Practices describes low-impact development (LID) guidelines for projects to reduce downstream erosion by more closely mimicking pre-project hydrology and minimizing pollutant runoff. The Handbook details strategies for selecting appropriate LID BMPs, design capture volume requirements for BMPs, and sizing calculation methodology for BMP implementation in specific watersheds in the County.

City of Norco General Plan

The City of Norco General Plan Conservation Element provides the policy context for Norco to achieve its vision for preservation, development, and utilization of natural resources (City of Norco 2014). General Plan Conservation Element goals and policies to protect water supply and quality relevant to the project include the following:

Goal 2.2: Continuously maintain an adequate water supply that exceeds minimum state and federal water quality requirements.

- **Policy 2.2.1:** The City will continue to seek ways to increase the available water resources through the preservation of existing resources, and the development of new ones.
- **Policy 2.2.1a:** Continue to promote water conservation through the use of xeriscape designs in new development. Additionally, public spaces shall incorporate xeriscape landscaping where feasible.
- **Policy 2.2.1b:** Continue to provide information to the public on ways to conserve water and reduce consumption. Water conservation measures shall be specific to the type of user (i.e. residential, animal-keeping, and commercial).
- **Policy 2.2.1c:** The City, along with other member agencies of the Western Riverside County Regional Wastewater Authority, should monitor the demand for reclaimed water, and then file Petitions of Change with the Regional Water Quality Control Board on an as-needed basis to reduce the amount of reclaimed water that is discharged into the Santa Ana River from the Archibald Treatment Facility. That water could then be available for transmission into the City's reclaimed water infrastructure system already in place to deliver water for park irrigation and other future facilities. New projects (both public and private) should include as part of each project the installation of infrastructure for reclaimed water where the installation for future use is feasible.
- **Policy 2.2.1d:** Ensure that there are adequate increases in water production and distribution capabilities to meet future growth demands.
- **Policy 2.2.2:** Continue to monitor water quality and use the different available resources for water supply to ensure that the City has an uninterrupted supply of potable and aesthetic water.
- **Policy 2.2.2a:** Develop and maintain inter-agency agreements and infrastructure improvements to have back-up water supply sources from adjoining water districts during times of emergencies and system maintenance requirements.
- **Policy 2.2.3:** Continue regional cooperative agreements and actions for the protection of regional water resources.
- **Policy 2.2.3a:** Protect water resources from pollutants through enforcement of the Clean Water Act with the issuance of National Pollutant Discharge Elimination System (NPDES) permits for new development, as applicable, including Storm Water Pollution Protection Plans (SWPPP) during construction, and Water Quality Management Plans (WQMP) post construction.
- **Policy 2.2.3b:** Ensure through continuing public information campaigns that all residents with large animals are aware that manure spreading as a means of disposal is strictly prohibited to prevent contamination to ground water supplies, and that only temporary storage is allowed until collection by a City-approved waste hauler. In conjunction with Goal 2.6 (Development of Energy Resources) the City should seek financing opportunities for the development of a manure to energy processing facility now that the feasibility of such an operation for this area has been demonstrated.
- **Policy 2.2.3c:** The City, in cooperation with the Riverside County Department of Environmental Health, should vigorously enforce regulations regarding the dumping of commercial and industrial hazardous wastes to prevent contamination to groundwater supplies.
- **Policy 2.2.3d:** Continue partnering with the Regional Water Quality Control Board and neighboring water agencies for regional solutions to long range water quality issues.

- **Policy 2.2.3e:** Continue monitoring water quality and implement measures as needed to maintain the aesthetic quality of the water as well as the potability.

Goal 2.3: Preserve resources by reducing the demand for water in city facilities and in private domestic use.

- **Policy 2.3.2a:** Require the installation of flow restriction fixtures in all new development.

Goal 2.4: Maintain public awareness of water quality issues and individual responsibilities as residents.

General Plan Conservation Element policies to protect soil resources and water quality relevant to the project include the following:

Goal 2.7: Encourage owners and developers to implement policies and improvements to reduce soil erosion.

- **Policy 2.7.2a:** Require all new development to be in compliance with its respective NPDES Permit and corresponding Water Quality Management Plan as applicable, and to not create a situation that would cause a violation of the City of Norco NPDES Permit.
- **Policy 2.7.2b:** On property that has been graded for construction but is not scheduled for immediate construction, require wildflower seeding or other appropriate and aesthetic groundcover to maintain soil resources.
- **Policy 2.7c:** Require approved development plans prior to the issuance of grading permits on commercial, industrial, and multi-unit residential sites.

Furthermore, the Water Resource Master Plan of the General Plan Conservation Element contains information regarding the conservation, utilization, and development of water resources and is based on the projections of the Water Facilities Master Plan, circa August 2001.

Additionally, the General Plan Safety Element contains policies pertaining to development in floodplain areas and substantial modification of watercourses. As described above, the project site is not located in a floodplain and does not support any discernible drainage courses, inundated areas, wetland vegetation, or hydric soils that would be considered jurisdictional watercourses.

City of Norco Municipal Code

The following City of Norco Municipal Code sections would apply to the project:

- **15.70 Stormwater/urban Runoff Management.** Norco Municipal Code Chapter 15.70 contains the City's stormwater/urban runoff management and discharge controls ordinance. The ordinance is intended to reduce pollutants in stormwater, regulate illicit connections and discharges to the storm drain system, and protect and enhance the quality of water resources in Norco in accordance with applicable federal, State, and regional regulations. Section 15.70.060 prohibits the discharge of any pollutants to any street, alley, sidewalk, storm drain, inlet, catch basin, or conduit and applies to all construction sites, and requires new developments and redevelopments to implement BMPs to prevent deterioration of water quality and maximize stormwater storage for reuse. Section 15.70.070 prohibits illicit connections to the storm drain system. Section 15.70.100 prohibits discharges in violation of the municipal NPDES permit (MS4 permit) or any NPDES permit for industrial or construction activity. Finally, Section 15.70.110

contains the ordinance's enforcement provisions and allows Norco to make BMPs a condition of approval to the issuance of a City permit.

- **15.08.020 Green Building Code Adoption.** This section requires that the rules, regulations, provisions and conditions set forth in the 2016 California Green Building Standards Code are adopted as the green building code of the City of Norco.
- **18.55.08 Xeriscape Requirements for Landscape and Irrigation Plans.** This section specifies the design guidelines for new development applications landscape and irrigation plans to demonstrate an aggregate reduction in the demand for and consumption of water.

4.9.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states the hydrology and water quality impacts of the project would be significant if the project would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
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 which would result in flooding on- or off-site;
   iii. 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; or
   iv. Impede or redirect flood flows;
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

b. Methodology

The analysis of hydrologic and water quality impacts is based on information and data contained in the Preliminary Hydrology Study and the Preliminary Project-Specific WQMP (Appendix I and Appendix J, respectively), including site runoff estimates, soil properties, impervious surface area, and water quality BMPs. The Preliminary Hydrology Study used methodologies outlined in the Riverside County Hydrology Manual to perform hydrologic and hydraulic calculations and estimated storm flows using the CIVILCADD/CIVILDESIGN Engineering Software, Version 7.1 to compile storm discharge generated by the Rational Method. The Preliminary Project-Specific WQMP was prepared in accordance with requirements of the Riverside County MS4 Permit using the SARWQCB's WQMP template.

In addition to the studies referenced above, aerial imagery, grading plans, and drainage plans for the site were reviewed to analyze pre- and post-construction hydrology. Documents published by the SWRCB and SARWQCB, including plans and permits, were reviewed to provide information on existing water quality as well as required water quality improvement measures. Finally, the federal Flood Insurance Rate Maps were assessed to determine flood potential on the project site.

c. Project Impacts and Mitigation Measures

Threshold 1:	Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact HWQ-1 CONSTRUCTION AND OPERATION OF THE PROJECT COULD INCREASE EROSION AND STORMWATER RUNOFF DUE TO SITE DISTURBANCE AND INCREASED IMPERVIOUS SURFACE AREA. COMPLIANCE WITH APPLICABLE REGULATIONS AND POLICIES, INCLUDING PREPARATION OF A SWPPP DURING CONSTRUCTION AND ON-SITE CAPTURE AND TREATMENT OF STORMWATER RUNOFF THROUGH BIOFILTRATION SYSTEMS AND DETENTION BASINS DURING OPERATION, WOULD REDUCE WATER QUALITY IMPACTS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project site currently contains a mostly unpaved, vacant lot and a RV sales lot consisting of a sales office (mobile facility), a storage shed, and paved parking/drive areas. Remnants of concrete foundation slabs from previous development are located in the central portion of the project site. Typical water quality impacts associated with the existing commercial operation on site would include runoff of trash, oil, metals, and other automotive chemicals that may accumulate on the RV sales lot. The project would involve construction of residential, a food garden with outdoor recreational amenities, and a hotel, which would change the nature of water quality impacts associated with proposed land uses on the site.

Grading and other construction activities associated with the project would have the potential to generate soil erosion and to increase sediment loads in stormwater runoff. Spills, leakage, or improper handling and storage of substances such as oils, fuels, chemicals, metals, and other substances from vehicles, equipment, and materials used during all construction phases could also cause pollutants to be present in stormwater runoff and impact water quality. Furthermore, operation of the project would increase impervious surface area on the project site, which could result in increased runoff and degraded water quality.

The project would be subject to federal, State, and local standards and regulations protecting water quality and hydrological resources discussed above, including the CWA, Riverside County MS4 Permit, the City of Norco Municipal Code, and applicable policies of the City of Norco General Plan. Potential construction and operational water quality impacts, as well as applicable regulatory requirements addressing these impacts, follow.

Construction

Grading, excavation, and other construction activities associated with the project could adversely affect water quality due to erosion resulting from exposed soils and the generation of water pollutants, including trash, construction materials, and equipment fluids.

As described in Section 2, *Project Description*, grading of the project site would involve excavation of approximately 60,000 cubic yards of soil, with excavations occurring to a maximum depth of approximately 30 feet. Soil disturbance associated with site preparation and grading activities would result in looser, exposed soils, which are more susceptible to erosion. The project site is underlain

predominantly by Ramona, Vista, and Buchenau loamy sands, with erosion factors (K factors) of 0.28, 0.20, and 0.37, respectively, indicating moderate potential for sheet and rill erosion by water (Natural Resources Conservation Service 2020).

Because the project would result in disturbance of more than one acre, on site construction activities would be subject to the NPDES Statewide General Construction Activity Stormwater permit. Compliance with the NPDES construction permit is further reiterated and required under the City's stormwater drainage system protection regulations (City of Norco Municipal Code, Title 15). For all covered projects, the NPDES construction permit requires visual monitoring of stormwater and non-stormwater discharges, sampling, analysis, and monitoring of non-visible pollutants, and compliance with all applicable water quality standards established for receiving waters potentially affected by construction discharges. Additionally, construction site operators would be responsible for preparing and implementing a SWPPP that outlines project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants in stormwater. Typical BMPs include:

- Utilizing temporary de-silting basins to minimize amounts of on-site soils and contaminants carried downstream by surface water flows;
- Conducting construction vehicle maintenance in staging areas where appropriate controls have been established to prevent deposition of fuels, motor oil, coolant, and other hazardous materials into areas where they may enter surface water and groundwater;
- Restricting the use of chemicals that may be transferred to surface waters by stormwater flows or leach to groundwater basins through water percolation into the soil;
- Requiring that permanent slopes and embankments be vegetated following final grading;
- Installation of silt fences, erosion control blankets;
- Proper handling and disposal of wastes; and
- Installation of anti-tracking pads at site exits to prevent off-site transport of soil materials.

Implementation of construction BMPs would minimize surficial erosion and transport of pollutants, and would comply with applicable NPDES requirements, thereby protecting water quality both on- and off-site.

Operation

According to the Preliminary Project-Specific WQMP (Appendix J), the existing project site contains approximately 93,000 square feet (sf), or approximately 11 percent, impervious area. With implementation of the project, the impervious area would increase substantially due to the construction of proposed buildings, parking lots, and roadways on the project site, totaling approximately 574,000 sf. Table 4.9-3 summarizes impervious surface cover under existing and proposed project conditions.

Increased impervious area on the project site could result in increased runoff that can carry pollutants to downstream water bodies and adversely affect water quality. Common pollutants associated with residential, hotel, and commercial development that could be discharged during operation of the project include petroleum hydrocarbons, automotive chemicals, and metals that accumulate on roadways and parking areas; fertilizers, pesticides, and herbicides applied to ornamental landscaping; trash and debris; and bacteria and nutrients from pet waste.

Table 4.9-3 Impervious Surface Areas

Site Conditions	Impervious Surfaces	Impervious Area (sf)	Percent of Project Site (%)[1]
Existing	RV dealership, concrete slab remnants	93,024	11.2
Project	Parking lots/on site circulation, sidewalks, roofs/buildings, hardscaping	574,080	69.0

sf = square feet

[1]Percentage calculated based on a 19.1-acre project site.

Source: Fuscoe Engineering, Inc. 2020b (Appendix J)

Under the MS4 permit issued by the SARWQCB, permittees, including the City of Norco, must require BMPs, where feasible, to capture and treat stormwater prior to discharge to their MS4 facilities. Such BMPs include, where appropriate, LID techniques to be implemented at new development and significant redevelopment project sites. Because the project would create or replace 10,000 sf or more of impervious surface on the project site, it constitutes new or significant redevelopment under the MS4 and is required to implement BMPs.

On site runoff would be captured and treated by a network of proposed bioretention/biotreatment BMPs, including four Bio-Clean Modular Wetland biofiltration systems and four detention basins, including a Contech infiltration chamber. Upon entering the Modular Wetland biofiltration systems, stormwater would first undergo pre-treatment, including separation of trash, sediment, and debris and flow through pre-filter cartridges to remove hydrocarbons and suspended solids. Within the Modular Wetland system, stormwater would undergo biofiltration, including treatment through WetlandMEDIA filters intended to reduce nutrients, sediments, and sediment-bound contaminants. Modular Wetland biofiltration systems would be incorporated as part of the on-site stormwater drainage system and would be located in the northeastern portion of the site (southwest of the proposed food garden), in the eastern portion of the site near the driveway to Hamner Avenue, near the middle of the site west of the proposed hotel, and in the southeastern portion of the site along the North Norco Channel.

In addition to the Modular Wetland biofiltration systems described above, the on-site stormwater drainage system would include a network of four detention basins to capture runoff from the site and control release to the North Norco Channel. One of these proposed detention basins would function as an infiltration chamber to allow captured stormwater to percolate through soil, providing both water quality treatment and recharge benefits. A Contech brand corrugated metal pipe detention chamber is proposed in the southeast corner of the site, where soil percolation rates were tested and determined to support an infiltration BMP. Prior to entering the perforated chamber, runoff would undergo hydrodynamic separation pre-treatment by continuous deflective separators that capture and retain trash and debris, sediment, and oil. Pre-treatment would reduce adverse water quality impacts to groundwater and downstream water bodies associated with these contaminants, as well as other sediment-bound pollutants.

Stormwater treatment BMPs would be regularly maintained pursuant to an Operation and Maintenance Plan and Maintenance Mechanism required in the Final WQMP and subject to approval by the SARWQCB.

Water quality impacts associated with construction of the project would be reduced by adherence to the requirements of the NPDES Construction General Permit, specifically preparation and implementation of a SWPPP. During operation, the biofiltration and infiltration chamber BMPs

detention basins would capture and treat on site runoff. Compliance with federal, State, and local regulations would require that stormwater runoff is captured and treated on-site, thereby protecting water quality both on and off-site. The project would not violate any water quality standards or waste discharge requirements, nor would it otherwise substantially degrade surface water or groundwater quality. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact HWQ-2 THE PROJECT WOULD NOT ENTAIL GROUNDWATER EXTRACTION, AND PROPOSED USES WOULD BE SERVED BY NORCO'S EXISTING AND PLANNED SUPPLIES. IMPERVIOUS SURFACE COVER WOULD INCREASE ON THE PROJECT SITE, WHICH WOULD REDUCE THE POTENTIAL FOR RECHARGE OF THE UNDERLYING AQUIFER. HOWEVER, PROJECT SITE RUNOFF WOULD CONTINUE TO DISCHARGE INTO NORTH NORCO CHANNEL AND, ULTIMATELY, UNLINED PORTIONS OF THE SANTA ANA RIVER, WHERE ADDITIONAL POTENTIAL FOR INFILTRATION AND RECHARGE EXISTS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project would not involve groundwater extraction that would result in substantial drawdown of an underlying aquifer. As discussed in Section 4.14, *Utilities and Service Systems*, the project would be served by Norco's existing and projected water supplies, which include groundwater from the Temescal and Chino Subbasins, as well as imported water purchased from the Metropolitan Water District of Southern California through the Western Municipal Water District. Therefore, the project would not substantially decrease groundwater supplies such that it would impede sustainable groundwater management of the Chino and Temescal Subbasins.

In its current condition, the project site contains approximately 93,000 sf of impervious surface associated with the existing RV sales lot and concrete foundation slab remnants (Table 4.9-3). The project would result in a substantial increase in impervious surfaces, totaling approximately 574,000 sf. This increase in impervious surface cover could reduce on site infiltration and, consequently, could result in a localized reduction in groundwater elevations.

Despite being largely devoid of impervious surfaces, the existing site condition provides low groundwater recharge potential. In April 2020, GeoTek, Inc. conducted percolation testing of soils underlying the project site (Appendix J). At three of the four testing sites, percolation rates ranged from 0.2 to 1.5 inches per hour, indicating slow percolation and limited groundwater recharge potential on-site. The site of the proposed infiltration chamber BMPs near North Norco Channel was determined to have a percolation rate of 2.1 inches per hour. Use of the proposed infiltration chamber at this site would allow for continued recharge of treated stormwater collected from the project site.

Although the low infiltration rate of soils on the project site generally limits its potential to provide recharge benefits, downstream water bodies, specifically the Santa Ana River, have a designated beneficial use of Groundwater Recharge (Table 4.9-2). All project site runoff would be captured by

the proposed storm drain system, consisting of biofiltration systems, detention basins, and an infiltration BMP. As with current drainage patterns, stormwater that discharges from the proposed stormwater drainage system would flow off-site through the North Norco Channel to the Prado Basin Management Zone and the Santa Ana River where infiltration opportunity exists for recharge of the underlying Temescal and Chino Subbasins. Given that post-development drainage would preserve flow to downstream surface water bodies where groundwater recharge could continue to occur, project impacts with respect to depletion of groundwater supplies and interference with recharge would be less than significant.

Mitigation Measures

Mitigation would not be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3.i:	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?
Threshold 3.ii:	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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
Threshold 3.iii:	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 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?

Impact HWQ-3 UNDER THE PROJECT, STORMWATER RUNOFF WOULD BE CAPTURED AND TREATED VIA THE PROPOSED STORMWATER DRAINAGE SYSTEM CONSISTING OF CATCHMENT BASINS, BIOFILTRATION SYSTEMS, AND DETENTION BASINS DESIGNED TO ACCOMMODATE THE 10-YEAR, 24-HOUR STORM EVENT. THE PROJECT WOULD NOT RESULT IN SUBSTANTIAL OFF-SITE HYDROMODIFICATION IMPACTS AND WOULD NOT ALTER THE COURSE OF A RIVER OR STREAM. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

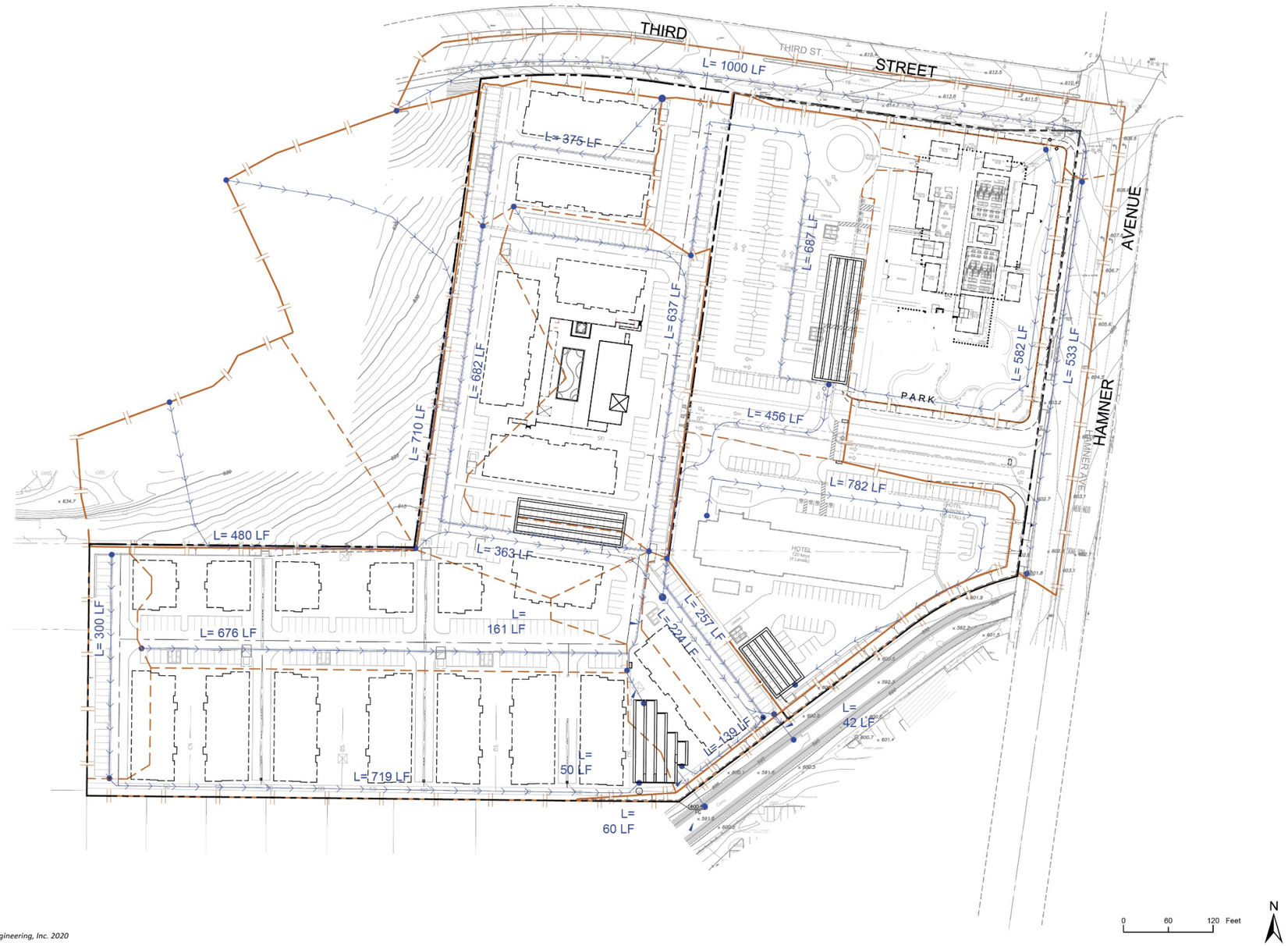
The project would maintain existing drainage patterns on the project site to the degree feasible. Presently, runoff generally flows outward in all directions from higher elevations in the center of the project site to lower elevations on the edges of the site. However, all runoff from the site ultimately discharges to the North Norco Channel along the site's southeastern boundary. This drainage pattern would continue, as the proposed stormwater capture and conveyance system would discharge site runoff to the North Norco Channel. Figure 4.9-3 shows the existing hydrology of the project site, and Figure 4.9-4 shows the hydrology of the project site after project implementation.

As described in Section 4.9.1, *Setting*, the project site does not support any discernible drainage courses or wetland areas that would be considered jurisdictional. The project site does not contain any streams or rivers that would be altered by the project.

Figure 4.9-3 Existing Hydrology Conditions

Source: Fuscoe Engineering, Inc. 2020

Figure 4.9-4 Proposed Hydrology Conditions



Source: Fuscoe Engineering, Inc. 2020

The increase in impervious surface area under the project would substantially increase site runoff, which would have the potential to result in flooding, erosion or siltation on and off-site due to the increased volume and velocity of stormwater. According to the Preliminary Hydrology Report (Appendix I), the project site generates approximately 105,000 cubic feet of runoff during the 10-year, 24-hour storm event under current conditions. Due to the increase in impervious surface area, the project site would generate approximately 270,000 cubic feet of runoff under the project conditions. As such, the site must detain approximately 165,000 cubic feet of stormwater on site to accommodate the anticipated increase in runoff.

Project stormwater capture and conveyance facilities are proposed to reduce the rate of discharge from the project site and treat runoff prior to discharge. Post-development drainage conditions would direct all surface runoff to a network of catch basins dispersed throughout the project site. At the catch basins, stormwater would enter the underground stormwater drainage system, flowing through Modular Wetland biofiltration systems and detention basins. The purpose of the proposed detention basins are to capture and slow the flow of stormwater to the North Norco Channel.

As indicated in Table 4.9-4, four proposed detention basins would provide over 165,000 cubic feet of runoff storage on the project site, accommodating the anticipated increase in site runoff that would occur under project conditions.

Table 4.9-4 Runoff Conditions and Runoff Storage Summary (24-Hour Storm Event)

	Volume (cubic feet)
Site Runoff (Pre-Project)	104,923
Site Runoff (Post-Project)	269,716
Runoff Increase	164,793
Detention Basin Storage Capacity	
Basin 1	46,911
Basin 2	23,218
Basin 3	40,778
Basin 4[1]	55,046
Total Storage Capacity	165,953
Storage Capacity Accommodates Increase in Site Runoff?	**Yes**

[1]Basin 4 will also function as an infiltration chamber.

Source: Fuscoe Engineering, Inc. 2020a (Appendix I)

As shown in Table 4.9-4, the four detention basins proposed as part of the project design would adequately store the anticipated increase in site runoff from the 10-year, 24-hour storm event. As described in Section 4.9.1, *Setting*, an approximately 4.4-acre area northwest of the project site currently drains to the North Norco Channel through the project site. A separate underground storm drain system is proposed to capture this off-site runoff and convey it to the North Norco Channel. Therefore, the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site or exceed the capacity of existing or planned stormwater systems.

As described above, surface runoff would flow to catch basins dispersed throughout the project site, where it would enter Modular Wetland biofiltration systems or a Contech infiltration chamber. Both of these proposed treatment systems would include pretreatment to remove trash, debris, sediment, hydrocarbons, and suspended solids. Furthermore, preparation of a WQMP under the Riverside County MS4 permit requires projects to assess whether drainage alterations would create a Hydrologic Condition of Concern (HCOC) due to hydromodification, such as changes in watershed hydrologic processes and runoff that result in increased streamflow and sediment transport. Because the project would incorporate detention basins that would capture and store the anticipated increase in site runoff, the project was determined not to result in a HCOC, according to the Preliminary Project-Specific WQMP (Appendix J). Given that the project would not result in a HCOC and would capture and treat all on-site stormwater runoff, alteration of drainage patterns on the project site would not result in substantial erosion or siltation off-site or provide substantial additional sources of polluted runoff. Therefore, project impacts would be less than significant.

Mitigation Measures

Mitigation would not be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3.iv:	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 impede or redirect flood flows?
Threshold 4:	Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact HWQ-4 THE PROJECT SITE IS NOT LOCATED IN A FLOOD, SEICHE, OR TSUNAMI ZONE, AND PROJECT WOULD NOT IMPEDE OR REDIRECT FLOOD FLOWS OR RISK RELEASE OF POLLUTANTS DUE TO PROJECT INUNDATION BY FLOOD, SEICHE, OR TSUNAMI. THEREFORE, THE PROJECT WOULD HAVE NO IMPACT.

As discussed in Section 4.9.1, *Setting*, the project site is located in Zone X, an area of minimal flood hazard designated by FEMA (FEMA 2008). The project site is approximately 30 miles from the Pacific Ocean. Norco is naturally insulated against extreme natural flooding hazards from the Santa Ana River by steep bluffs that exist along the south bank of the river. Therefore, tsunami and seiche hazard is not a design consideration for the project.

The General Plan Safety Element identifies the SilverLakes Equestrian Center located on the north side of the City, a portion of the Santa Ana Riverbed along the west border, and small pockets of land around flood control channels as areas most at risk for flooding. Although the project site is adjacent to the North Norco Channel, it is not identified as an area at risk of flooding. The North Norco Channel was excavated to a nominal drainage capacity and has proven marginally adequate for moderate storms. During a one percent Annual Flood storm, the channel would be inadequate and result in flooding in the area of Sierra Avenue, which is approximately one-mile northeast (upstream) from the project site, on the east side of I-15 (City of Norco 2013). As such, the project would not impede or redirect flood flows. Furthermore, the project does not involve land uses such as landfills, wastewater treatment plants, or industrial facilities that would store or process contaminants that could be released in the event of inundation. The project would not risk

release of pollutants due to inundation by flood, tsunami, or seiche. Therefore, the project would have no impact.

Mitigation Measures

Mitigation would not be required.

Significance After Mitigation

The project would result in no impact without mitigation.

Threshold 5:	Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact HWQ-5 THE PROJECT WOULD IMPLEMENT WATER QUALITY BMPS IN ACCORDANCE WITH APPLICABLE LOCAL AND REGIONAL REQUIREMENTS, WHICH WOULD REDUCE POTENTIAL DOWNSTREAM WATER QUALITY IMPACTS. AS SUCH, THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE WATER QUALITY CONTROL PLAN FOR THE SANTA ANA REGION. THE PROJECT SITE OVERLIES THE TEMESCAL SUBBASIN, FOR WHICH A GSP IS CURRENTLY BEING DEVELOPED, BUT HAS NOT YET BEEN ADOPTED. THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A SUSTAINABLE GROUNDWATER MANAGEMENT PLAN. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The SARWQCB's Basin Plan designates beneficial uses for surface waters in the Santa Ana region and associated water quality objectives to fulfill such uses. Table 4.9-2 in Section 4.9.1, *Setting*, lists beneficial uses and water quality impairments for adjacent and downstream water bodies, including the Prado Basin Management Zone and Santa Ana River. The Prado Basin Management Zone, which receives the project site's runoff via the North Norco Channel, is currently listed as impaired because the majority of the water samples taken for the Prado Basin Management Zone exceeded the Basin Plan's Objective of 6.5 - 8.5 pH (SWRCB 2017). Reach 3 of the Santa Ana River is also listed as impaired for copper, lead, and indicator bacteria.

As described in Impact HWQ-1 and Impact HWQ-3 above, the project would implement capture, filtration, and detention of stormwater runoff, as required pursuant to the Riverside County MS4 permit. Stormwater from the site would be treated in Modular Wetland biofiltration systems, which are intended to reduce concentrations of water quality contaminants, including those for which the Prado Basin Management Zone and Reach 3 of the Santa Ana River are impaired. The proposed stormwater system would also convey water to four detention basins, which would slow the flow of runoff and provide an additional opportunity for sediment and sediment-bound contaminants to settle out prior to discharge. One such detention basin would serve as an infiltration chamber, providing additional water quality benefits.

The requirements of the Riverside County MS4 permit are intended to protect water quality and support attainment of water quality standards in downstream receiving water bodies. With incorporation of the BMPs described above in accordance with the Riverside County MS4 permit, the project would not impair or contribute to ongoing impairments of existing or potential beneficial uses of downstream water bodies and would not conflict with or obstruct implementation of the Basin Plan.

The project site is located in the Temescal Subbasin, which is required to prepare a GSP pursuant to SGMA by January 31, 2022. The Temescal GSA—formally comprised of the City of Corona, City of Norco, and Home Gardens County Water District—is currently developing the GSP for the Temescal

Subbasin, with the process largely led by the City of Corona. As discussed under Impact HWQ-2, the project does not propose any new wells, would not substantially impede recharge in the Temescal Subbasin, and would be served by Norco's existing and planned supplies. The City is active in regional strategies related to water supply and groundwater management with other nearby water agencies, including Western Municipal Water District, Chino Desalter Authority, Jurupa Community Services District, and the Chino Basin Watermaster (City of Norco 2016). The project would not conflict with or obstruct implementation of a sustainable groundwater management plan. Therefore, project impacts would be less than significant.

Mitigation Measures

Mitigation would not be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.9.4 Cumulative Impacts

Planned and pending development in the vicinity of the project site, as described in Section 3, *Environmental Setting*, include 11 projects in Norco, 21 projects in Corona, one project in Eastvale, and one project in Riverside. Cumulative development and redevelopment projects in the vicinity of the project site would increase impervious surface area in the Santa Ana watershed, thereby potentially increasing surface water runoff and associated pollutant loading to water bodies.

All projects exceeding one acre of disturbance area would be subject to requirements of the NPDES Statewide Construction General Permit, including preparation and implementation of a SWPPP to minimize construction-related erosion, sedimentation, and non-point source pollution. All cumulative development projects would also be subject to the requirements of the applicable MS4 permit, which would require project-specific BMPs to capture and treat stormwater runoff for new development and significant redevelopment projects. As a result, stormwater detention infrastructure would expand incrementally with the pace of development in the watershed, which would reduce peak flows and minimize the potential for downstream flooding or other hydrologic impacts. Planned and pending projects may be required to implement project-specific flood or HCOC mitigation measures, depending on the significance of these impacts.

Cumulative development could increase the discharge of urban pollutants to surface waters and groundwater. However, all new development would be subject to the water quality requirements of the SARWQCB, the Riverside County MS4 permit, and other applicable federal, State, and local regulations. Adherence to such regulations would address any adverse cumulative impacts resulting from individual new developments and reduce cumulative impacts with respect to hydrology and water quality to a less than significant level.

4.10 Land Use and Planning

This section analyzes the project's potential impacts on land use and planning. The analysis contains a description of the planning context of the project site, the regulatory setting for project site land use, and a discussion of the project's consistency with applicable land use plans, policies, and regulations.

The analysis is based on the City of Norco General Plan, the City of Norco Municipal Code, and the Norco Auto Mall Specific Plan.

4.10.1 Setting

a. Project Area

The 19.1-acre project site consists of three parcels, which is mostly undeveloped with exception of the existing RV sales lot (Norco RV Center, located at 2350 Hamner Avenue) located at the southwest corner of the Third Street and Hamner Avenue intersection. The remainder of the project site contains remnants of foundations with evidence of previous grading and development. The project site currently contains a few scattered trees and does not contain any permanent structures.

b. Surrounding Land Uses

The project site is bordered by existing commercial development to the north and east, commercial and residential development to the south, and residential and institutional development to the west. Table 4.10-1 details the surrounding land use pattern and land use regulatory designations.

Table 4.10-1 Surrounding Land Use Designations

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	RV Sales Lot in northeast corner, remainder vacant land	SP (Specific Plan), HDO Overlay	SP (Specific Plan), HDO Overlay, with underlying C-G (Commercial General)
North	Commercial (automotive, office commercial services, retail) and Community (church)	CC (Commercial Community)	C-G (Commercial General)
East	Commercial (automotive, services, and food service)	SP (Specific Plan)	SP (Specific Plan)
Southeast	Commercial (automotive and food service)	SP (Specific Plan)	SP (Specific Plan)
Southwest	Single-family residential	RA (Residential Agricultural)	A-1-20 (Agricultural – Low Density 20,000 square feet)
West	Institutional (college campus)	PL (Public Lands)	OS (Open Space)

General Plan Land Use and Zoning Designations

The 19.1-acre project site has a General Plan land use and zoning designation of Specific Plan (SP) within the Housing Development Overlay (HDO) (City of Norco 2012a). Table 4.10-2 details the existing density regulations and intended land uses.

According to the General Plan Land Use Element, the C-G zone is to provide a general commercial atmosphere geared toward national retailers, restaurants, tourist commercial uses, and businesses that can take advantage of the proximity and visibility from Interstate 15 (I-15).

The project site was rezoned in 2012 to the HDO zone, and the Norco Auto Mall Specific Plan was also amended to apply the HDO to the three project parcels. The 2014-2012 Housing Element identifies the project site as having great potential for mixed use development (City of Norco 2013a).

Table 4.10-2 General Plan Land Use Requirements

Land Use	Du/acre	Intent of Land Use Designation
Commercial General (C-G)	N/A	Retail and commercial
Housing Development Overlay (HDO)	20 to 30 du/acre	Residential (single-family, multi-family, condominiums, townhomes, courtyard housing), mixed-use

Du = Dwelling Unit
N/A = Not Applicable
Source: City of Norco 2019

Norco Auto Mall Specific Plan Designation

The project site is located in the Norco Auto Mall Specific Plan Area and is located in Area A, which has an underlying zoning designation of C-G (City of Norco 2018). Area A allows for new automobile dealerships and accessory uses as an integral part of the operation of a new automobile dealership. Other uses permitted by the underlying C-G zone are allowed upon approval of a Conditional Use Permit (CUP), which may be granted if the proposed use is similar and compatible with permitted uses, there is reasonable assurance that the use would be economically viable, and the proposed use would not materially adversely affect the goals, objectives, and purpose of the Specific Plan (City of Norco 2009).

The C-G zoning regulation provides for a variety of commercial and retail uses centered around customer retail, eating and drinking establishments, and entertainment to serve the community as well as visitor-oriented needs (City of Norco 2019). Table 4.10-3 details the standard development regulations for the underlying C-G zone.

Parking for the project is determined based on the type of uses and regulated in the City of Norco Municipal Code Chapter 18.38. The project requires 640 parking spaces for the proposed residential use and 207 parking spaces for the proposed food garden and hotel uses. The project would provide 581 parking spaces for residential use, 211 parking spaces for food garden and hotel uses, and 76 parking spaces to be shared by all proposed uses (i.e., guest parking for residential, and overflow parking for food garden and hotel) as detailed in Section 2, *Project Description*. Therefore, the project would provide a total of 868 parking spaces on the project site to accommodate all proposed uses, and would comply with the City's parking requirements.

Housing Development Overlay

The HDO, as outlined in Chapter 18.64 of the Norco Municipal Code, is intended to facilitate the development of affordable housing within a mixed-use context. As stated above and shown in Table 4.10-2, the HDO permits residential development on project site between 20 to 30 dwelling units per acre (du/acre). The HDO allows for a variety of residential developments that can include single-family, multi-family, condominiums, townhomes, and courtyard housing (City of Norco 2019).

The HDO also provides flexibility for mixed-use projects as well as a density bonus option to encourage the development of affordable housing. The HDO does not contain HDO-specific development standards.

Table 4.10-3 C-G Zoning Development Standards

Development Standard	C-G Zone
Minimum Lot Size	13,125 sf
Minimum Lot Width	75 ft
Minimum Lot Depth	175 ft
Minimum Street Side Setback	
Building	25 ft
Parking	10 ft
Minimum Interior Side Setback	0[1]
Minimum Rear Setback	0[1]
Maximum Building Height	35 ft[2]
Maximum FAR	N/A
Maximum Lot Coverage	N/A

[1] Where the property abuts a school site or any "A' or "R" zone, a 50 ft setback is required

[2] A CUP application may allow for a height increase up to 50 ft.

sf = square feet, ft = feet, N/A = Not Applicable

Source: City of Norco 2019

4.10.2 Regulatory Setting

a. State

Senate Bill 330, Housing Crisis Act of 2019

Senate Bill 330 (SB 330) was signed by Governor Gavin Newsom on October 9, 2019 and declared a statewide housing emergency to be in effect until January 1, 2025. SB 330 prohibits cities and counties from the following actions:

- Establishing rules that would change the land use designation or zoning of parcels to a less intensive use or reducing the intensity of the land that was allowed under the specific or general plan as is in effect on January 1, 2018;
- Imposing or enforcing a moratorium on housing development within all or a selection of the local agency's jurisdictions;
- Imposing or enforcing new design standards established on or after January 1, 2020, that are not objective design standards;
- Establishing or implementing limits on permit numbers issued by the local agency unless the limit was approved before January 1, 2005, in a "predominantly agricultural county."

b. Regional

SCAG 2016 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the federally recognized metropolitan planning organization (MPO) for this region, which encompasses over 38,000 square miles, and comprises representatives of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) was adopted by SCAG Regional Council in April 2016. Most of the 2016 RTP/SCS goals and policies are related to transportation and the efficiency of transportation; therefore, most are not directly relevant to the project. However, goals that are related to the project are listed below:

- **Goal 1:** Align the plan investments and policies with improving regional economic development and competitiveness.
- **Goal 2:** Maximize mobility and accessibility for all people and goods in the region.
- **Goal 3:** Ensure travel safety and reliability for all people and goods in the region.
- **Goal 6:** Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
- **Goal 7:** Actively encourage and create incentives for energy efficiency, where possible.
- **Goal 8:** Encourage land use and growth patterns that facilitate transit and active transportation.

Riverside County Airport Land Use Commission

The Riverside County Airport Land Use Commission (ALUC) governs 16 airports in Riverside County by implementing the *Riverside County Airport Land Use Compatibility Plan Policy Document*, which establishes policies and compatibility maps for each of the 16 individual airports potentially affecting land use within Riverside County (Riverside County ALUC 2004). The Land Use Compatibility Plan establishes procedural requirements for compatibility and review of development projects within the Airport Influence Area.

Corona Municipal Airport Land Use Compatibility Plan

The Corona Municipal Airport Land Use Compatibility Plan (ALUCP) reduces potential conflict between the Airport and surrounding land uses by providing guidance to affected local jurisdictions regarding airport land use compatibility matters. The main objective of the ALUCP is to avoid future compatibility conflicts rather than to remedy existing incompatibilities. The ALUCP does not place any restrictions on the present and future role, configuration, or use of the airport. The Corona Municipal Airport is located nearest to the project site, approximately 2.3 miles southwest. The project site is not located in the Corona Municipal Airport compatibility zone or influence area.

c. Local

City of Norco General Plan

The City of Norco General Plan serves as a guide for land use decision making and the implementation of the community's vision for the City. Each of the seven elements in the General Plan contains objectives and policies to help guide development and decisions in the City, and are listed below:

- The Land Use Element designates the distribution, location, and balance of land uses within the City.
- The Circulation Element provides for safe, functional, and integrated circulation systems for all transportation forms.
- The Conservation Element provides direction to the City regarding the preservation, development, and utilization of natural resources that include water, energy, soils, mineral, and wildlife.
- The Housing Element analyzes existing and future housing needs; identifies development constraints, developable lands, financial opportunities, and administrative resources for housing; sets goals and policies to meet community housing needs; and establishes housing programs and an implementation plan.
- The Noise Element contains guidelines to protect sensitive land uses and residents from noise and vibration impacts of other more intensive land uses. The noise ordinance provides enforceable codes that ensure noise nuisances are eliminated or controlled to acceptable levels.
- The Open Space Element identifies the recreational and open space needs of Norco and provide a framework to enhance the distinctive character of the community and linkages among trail and wildlife corridors.
- The Safety Element contains goals and policies for responding to potential natural hazards.

2016 City of Norco Strategic Plan

The 2016 City of Norco Strategic Plan was adopted in 2016 and serves as a guide for City decisions and actions based on strategic priorities specific to citywide infrastructure, community outreach, financial stability, economic development, and public safety. The focus on these strategic priorities is meant to further establish Norco as "Horsetown USA" by 2025, known to be a family-friendly and attractive destination community. The City has achieved nearly every action plan that was included in the 2016 Strategic Plan and will formulate a new Strategic Plan in 2020 to address current issues and include citywide aspirations.

Norco Auto Mall Specific Plan

The Norco Auto Mall Specific Plan is intended to create an area that encourages the location of new auto dealers and associated uses to provide community serving commercial and retail uses. The Norco Auto Mall Specific Plan aims to take advantage of I-15 exposure to attract commercial businesses and contains select parcels fronting Hamner Avenue between Second Street and Third Street. The Norco Auto Mall Specific Plan contains the following three SP zones with underlying zones:

- **Area A, underlying zone Commercial General (C-G):** Permits new automobile dealerships and accessory uses. Other uses permitted for the C-G zone are allowed with a Conditional Use Permit (CUP).
- **Area B, underlying zone Heavy Commercia/Light Manufacturing (M-1):** Permits same uses as Area A, and includes other vehicle-related services such as sales, repairs, parts and supplies, rentals, washing, and storage.
- **Area C, underlying zone Commercial General (C-G):** Permits same uses as Area A and Area B, and includes service-, food-, and office-related uses.

The following Norco Auto Mall Specific Plan policies are relevant to the project:

- **Policy 40.7:** Design theme of buildings, landscaping, and all site improvements shall be integrated to comprise a unified motif throughout the project area.
- **Policy 40.11:** The maximum degree of flexibility, consistent with the type of development and protection desired, shall be provided in order to encourage imaginative design and management.
- **Policy 120.1:** Direct access to the Specific Plan area will be provided by Hamner Avenue, Second and Third Streets.
- **Policy 120.3:** No equestrian trails will be constructed in the auto mall area except for a trail within the south parkway area of Third Street. A minimum six-foot high masonry wall shall be constructed separating the trail form the dealership. Access to Third Street will be secondary and designed for service vehicles only.

City of Norco Municipal Code

Title 18, *Zoning*, of the City of Norco Municipal Code defines and provides development standards for all land use zones. As stated above, the project site has an underlying zoning designation of C-G and is also located in the HDO zone.

Commercial General (C-G) Zoning

The C-G zone, as outlined in the City of Norco Municipal Code Chapter 18.29, permits retail, eating and drinking establishments, and entertainment to serve the needs of the community. The purpose of the C-G zone is to provide a general commercial atmosphere that is geared toward accommodating national retailers, restaurants, tourist commercial uses, and businesses that can take advantage of the proximity and visibility from 1-15. Structures in the C-G zone are to incorporate the western design theme to the extent feasible and compatible with existing development.

Housing Development Overlay (HDO) Zone

The HDO, as outlined in the City of Norco Municipal Code Chapter 18.64, applies to specific properties within the City. Development of HDO zoned parcels require an HDO Site Plan and are required to meet the requirements for residential development before non-residential uses, pursuant to the underlying zoning, are allowed.

The entire project site is within the HDO, which allows high-density affordable housing and a mix of residential and non-residential development. As previously stated, the HDO specifies residential development at 20-30 dwelling units per acre; or up to 35 units per acre if a density bonus is utilized. The HDO density bonus is provided for developments that contain equestrian facilities or parkland/open space beyond the requirements outlined in the City's zoning code. The General Plan Housing Element states that approximately 184 units can be accommodated on the 19.1-acre project site, assuming a density of 20 dwelling units per acre for approximately 50 percent of the site. The Housing Element also states that the project site is ideal for lower income housing due to its proximity to the Riverside Community College – Norco Campus, employment opportunities at the auto dealerships, as well as restaurants and other retail businesses.

4.10.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states the land use and planning impacts of the project would be significant if the project would:

1. Physically divide an established community;
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

b. Methodology

The evaluation of project impacts to land use and planning is based on a comparison of the project to the applicable plans, policies, and regulations to determine if implementation of the project would conflict with a plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project physically divide an established community?

Impact LU-1 THE PROJECT WOULD NOT ALTER THE PHYSICAL ARRANGEMENT OF ANY NEIGHBORING RESIDENTIAL COMMUNITIES NOR DIVIDE AN ESTABLISHED COMMUNITY. THE PROJECT WOULD HAVE NO IMPACT.

The project site is mostly undeveloped with an existing RV sales lot located in the northeastern corner of the site. The project site is bounded by Third Street to the north, Hamner Avenue to the east, and an open drainage channel to the southeastern corner of the project site. Existing residences are located to the south and west of the project site along Paddock Lane and Mountain Avenue, respectively. The Norco STEM Center is located to the west of the project site.

The project site does not contain any residences, sidewalks, or accessible areas currently on the project site. The project would not displace any residences or result in the removal or division of established community infrastructure (such as sidewalks, roads, bike lanes). The project does not propose, nor would require, elements or operations that would physically divide the existing adjacent community. Therefore, the project would not physically divide an established community, and would have no impact.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

The project would result in no impact without mitigation.

Threshold 2:	Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact LU-2 THE CURRENT LAND USE AND ZONING DESIGNATIONS ALLOW THE PROPOSED RESIDENTIAL AND COMMERCIAL USES. THE PROJECT, AS PROPOSED, IS CONSISTENT WITH APPLICABLE POLICIES IN REGIONAL AND LOCAL PLANS, AND IMPLEMENTATION OF THE PROJECT WOULD NOT REQUIRE A GENERAL PLAN OR ZONING AMENDMENT. PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The proposed project entails mixed uses comprised of 320 multi-family residential units, an 8,700 sf food garden, and 120-room hotel building with residential, community, and visitor serving recreational amenities as described in Section 2, *Project Description*. Though the project would be inconsistent with the Norco Auto Mall Specific Plan, the project site was rezoned in 2012 to the HDO zone and the Norco Auto Mall Specific Plan was also amended to apply the HDO to the project site (City of Norco 2013a). Therefore, the current land use and zoning on the site allow these proposed uses and development design since the project site is located in the HDO; the project would not require a General Plan land use or zoning code amendment.

Consistency with Land Use Regulations

SCAG 2016 RTP/SCS Goals

As stated above in Section 4.10.2, *Regulatory Setting*, the 2016 RTP/SCS goals and policies focus largely on transportation and the efficiency of transportation, which are not applicable to the proposed project. However, the project would implement and is consistent with the SCAG goals that are listed in Table 4.10-4. Therefore, implementation of the project would not conflict with the 2016 RTP/SCS, and the project would have a less than significant impact.

Table 4.10-4 Project Consistency with Applicable 2016 RTP/SCS Goals

Goal	Project Consistency
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent.** The project would provide mixed uses which include residential and visitor-serving commercial uses such as a food garden and hotel, with outdoor community gathering spaces that would enhance the Norco lifestyle, provide additional housing for the region, and improve regional economics by providing additional goods and services in the City. Therefore, the project would be consistent with Goal 1.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	**Consistent.** The project would provide mixed uses along Hamner Avenue, a prominent corridor in Norco with access to I-15. The project site's proximity to Hamner Avenue and I-15 would maximize local and regional accessibility to the proposed resident- and visitor-serving uses. Therefore, the project would be consistent with Goal 2.
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	**Consistent.** The project does not involve regional travel improvements, but does provide street improvements, driveway accessibility, and a safe on-site circulation for future project residents and customers. In line with the equestrian lifestyle of Norco, the project includes a horse paddock and equestrian trail for use by the Norco community, which would be located by the food garden as described in Section 2, *Project Description*. Therefore, the project would be consistent with Goal 3.

Goal	Project Consistency
Goal 4: Preserve and ensure a sustainable regional transportation system.	**Not Applicable.** As stated above, the project does not involve regional travel improvements, but does include street improvements, driveway accessibility, and safe on-site pedestrian and vehicular circulation. Therefore, though Goal 4 is not applicable to the project, implementation of the project would not inhibit regional or City actions undertaken to pursue Goal 4.
Goal 5: Maximize the productivity of our transportation system.	**Not Applicable.** As stated above, the project does not involve regional travel improvements, but does include street improvements, driveway accessibility, a horse paddock and equestrian trail, and safe on-site pedestrian and vehicular circulation. Therefore, though Goal 5 is not applicable to the project, implementation of the project would not inhibit regional or City actions undertaken to pursue Goal 5.
Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).	**Consistent.** The project does not involve regional travel improvements, but in line with the equestrian lifestyle of Norco, the project includes a horse paddock and equestrian trail for use by the Norco community, which would be located along the frontage of Third Street and most of Hamner Avenue, around the perimeter of the food garden, with a connection to an existing off-site equestrian trail on Mountain Avenue as described in Section 2, *Project Description*. The provision of a horse paddock and equestrian trail on the project site would encourage the use of the existing Class I equestrian trail along Third Street to access the proposed food garden. The proximity of the project site to existing residential, commercial, and institutional uses would encourage active transportation use by future project residents as well as by Norco residents accessing the proposed food garden and recreational amenities. Therefore, the project would be consistent with Goal 6.
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	**Consistent.** As described in Section 2, *Project Description*, the project includes design features that promote energy efficiency and sustainability, such as up to 10 electric vehicle (EV) charging spaces and nine bicycle racks and two long-term bicycle storage spaces for food garden customers; seven EV spaces and six bicycle racks and one long-term bicycle storage space for hotel guests; and drought tolerant low-water use landscaping. Therefore, the project would be consistent with Goal 7.
Goal 8: Encourage land use and growth patterns that facilitate transit and active transportation.	**Consistent.** The project includes street improvements, driveway accessibility, and a safe on-site circulation for future project residents and customers. In line with the equestrian lifestyle of Norco, the project includes a horse paddock and equestrian for use by the Norco community, which would be located by the food garden as described in Section 2, *Project Description*. The proximity of the project site to existing residential, commercial, and institutional uses would encourage active transportation use by future project residents as well as by Norco residents accessing the proposed food garden and recreational amenities. Therefore, the project would be consistent with Goal 8.
Goal 9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Not Applicable.** As stated above, the project does not involve regional travel improvements, but does include street improvements, driveway accessibility, and safe on-site pedestrian and vehicular circulation. Therefore, though Goal 9 is not applicable to the project, implementation of the project would not inhibit regional or City actions undertaken to pursue Goal 9.

Source: SCAG 2016

City of Norco General Plan Policies

The project has been designed in conformance with the goals and policies of the City of Norco General Plan. Table 4.10-5 lists the General Plan policies that are applicable with an evaluation of the project's consistency with each policy. As described, the project would be consistent with all of the applicable General Plan policies, as detailed below in Table 4.10-5. Therefore, the project would have a less than significant impact.

Table 4.10-5 Project Consistency with Applicable General Plan Policies

Policy	Project Consistency
Land Use Element	
Policy 2.1.1: The City needs to maintain a land use plan that keeps commercial development and traffic routes as separate as possible from the City's animal keeping residential areas.	**Consistent.** The project would route traffic to and from the site via Hamner Avenue to I-15, and Third Street. These roadways are not developed with animal keeping residential areas. Rather, Hamner Avenue is a prominent corridor within Norco developed with commercial uses. Third Street contains a Class I equestrian trail, which the project would be compatible with via the provision of a horse paddock and equestrian trail. Therefore, the project would be consistent with Policy 2.1.1.
Policy 2.1.2: The City of Norco is nearing build out conditions and has a limited supply of commercial and industrial zoned properties.	**Consistent.** The project would develop the site pursuant to the existing General Plan, C-G and HDO zoning regulations, and Norco Auto Mall Specific Plan for residential and commercial uses. Therefore, the project would be consistent with Policy 2.1.2.
Policy 2.3.1b: All commercial facilities shall be built and maintained in accordance with Health and Safety Code Requirements and shall meet seismic safety regulations and environmental regulations including noise, air quality, water, and other environmental resources as they apply.	**Consistent.** The proposed commercial uses would be maintained in accordance with all health, safety, and seismic, and environmental regulations that would be ensured through construction and operational permitting by the City. Therefore, the project would be consistent with Policy 2.3.1b.
Policy 2.4.1a: New development in the City shall incorporate western-themed architectural feature and building style, the level of which will be determined based on the location of a building, the type of construction, and the use of a building.	**Consistent.** Project aesthetics are analyzed and discussed in Section 4.1, *Aesthetics*. The proposed structures for the food garden and hotel would have a western theme to reinforce the City's equestrian lifestyle. Therefore, the project would be consistent with Policy 2.4.1a.
Policy 2.4.1c: Street and on-site landscaping shall be provided in such a way so as to create pleasing site-related aesthetics, but also to maintain visual corridors and vista points on a neighborhood and community scale as much as possible.	**Consistent.** The project conceptual landscape plan has been designed and would be implemented pursuant to the requirements of the Norco Auto Mall Specific Plan. As discussed in Section 4.1, *Aesthetics*, the project site and landscape plan have been designed to create pleasing aesthetics and maintain visual corridors within the project area while maintaining a western/equestrian theme. Therefore, the project would be consistent with Policy 2.4.1c.
Policy 2.4.1g: Commercial development proposed in areas that adjoin residential development shall provide adequate buffering by landscaping, screening, or open space. Height limits shall be established in all commercial zones so as to protect the privacy and solar access on adjacent residential lots.	**Consistent.** The project entails mixed residential and commercial uses. The project site plan includes landscaping throughout the site, outdoor common recreational areas for project residents, and visitor- and customer-serving recreational amenities for the Norco community. Therefore, the project would be consistent with Policy 2.4.1g.

Policy	Project Consistency
Policy 2.5.1a: The City shall construct adequate public arenas, stalls, and exercise areas within easy access of all neighborhoods and trails.	**Consistent.** The project includes a horse paddock and equestrian trail for use by the Norco community, which would be located by the food garden as described in Section 2, *Project Description*. Outdoor recreation areas and lawns for public use in the food garden area would also be included as part of the project. Therefore, the project would be consistent with Policy 2.5.1a.
Policy 2.5.3a. For all new development, existing and projected design capacities for affected schools shall be determined.	**Consistent.** As discussed in Section 4.12, *Public Services*, the project would not result in the need for new or expanded school facilities. The project would be consistent with Policy 2.5.3a.
Policy 2.5.3d. All new residential construction shall include the necessary infrastructure to provide services concurrent with City standards, including a lateral connection to the City's sewer system for each single lot that is developed with a home.	**Consistent.** Project impacts on utilities and service systems are discussed in Section 4.14, *Utilities and Service Systems*. The project would be consistent with Policy 2.5.3d.
Policy 2.6.1: In areas not already designated for permanent open space in the Conservation or Open Space Elements, land development should be done in such a manner that the City's primary landforms and scenic vistas are protected.	**Consistent.** The project site does not include an open space designation. As described in Section 4.1, *Aesthetics*, there are no landforms, scenic vistas, or scenic resources on the project site. Proposed buildings would be setback from roadways and would not obstruct the long-distance public views of the Santa Ana and San Gabriel Mountains. Therefore, the project would be consistent with Policy 2.6.1.
Policy 2.7.2b: New development requiring discretionary approval from the Planning Commission shall be approved with a condition that requires any construction activity to stop upon discovery of archaeological resources until such time as a qualified archaeologist, retained by the property owner or developer, has investigated the site and made recommendations regarding the disposition of any items. Human remains shall not be moved until the Riverside County Coroner's Office has been notified.	**Consistent.** Project impacts on archaeological resources are discussed in Section 4.4, *Cultural Resources*. Mitigation Measure CUL-1 would ensure ground disturbing construction activities have less than significant impacts on previously unidentified archaeological resources. Therefore, the project would be consistent with Policy 2.7.2b.
Policy 2.7.2c: New development shall be coordinated with Native American tribes that have an historical presence and interest in the Norco region, or any other groups with historical interest.	**Consistent.** Project impacts on tribal cultural resources are discussed in Section 4.4, *Cultural Resources*. The City of Norco, as Lead Agency, initiated AB 52 consultation for the project with Native American tribes that have a historic presence and interest in the Norco region. Mitigation Measures TCR-1, TCR-2, and TCR-3 would ensure ground disturbing construction activities have less than significant impacts on previously unidentified tribal cultural resources. Therefore, the project would be consistent with Policy 2.7.2c.
Circulation Element	
Policy 1.1: Develop a circulation system of equestrian trails connecting all residential lots into a city-wide network that connects residential areas with commercial areas, public facilities, and open space/recreational elements.	**Consistent.** The project includes a horse paddock and equestrian trail for use by the Norco community, which would be located by the food garden as described in Section 2, *Project Description.* The horse paddock and equestrian trail would support and reinforce the equestrian lifestyle of Norco. A Class I equestrian trail is located on Third Street, for which the project would encourage the use by the Norco community. Therefore, the project would be consistent with Policy 1.1.

Policy	Project Consistency
Policy 1.4: Follow appropriate City standards in designing and constructing future street improvements.	**Consistent.** The project includes street improvements, driveway accessibility, a horse paddock and equestrian trail, and safe on-site pedestrian and vehicular circulation, analyzed in Section 4.13, *Transportation*. The project would be consistent with Policy 1.4.
Policy 4.1: Require all new developments to provide adequate off-street parking based on expected parking needs.	**Consistent.** The project would provide 868 on site (off-street) parking spaces sufficient to meet the needs of the proposed residential and commercial uses, and consistent with the provisions of the City of Norco Municipal Code Chapter 18.38. Therefore, the project would be consistent with Policy 4.1.
Conservation Element	
Policy 2.1.1a: Continue to promote water conservation through the use of xeriscape designs in new development. Additionally, public spaces shall incorporate xeriscape landscaping where feasible.	**Consistent.** The conceptual landscape plan and proposed plant palette includes low-water use, drought tolerant plants. The project would include irrigation systems for proposed landscaping. Therefore, the project would be consistent with Policy 2.2.1a.
Policy 2.1.1b: New projects (both public and private) should include as part of each project the installation of infrastructure for reclaimed water where the installation for future use is feasible.	**Consistent.** The project would include irrigation systems for reclaimed water for the proposed landscaping on-site. Therefore, the project would be consistent with Policy 2.1.1b.
Policy 2.1.2a: Protect water resources from pollutants through enforcement of the Clean Water Act with the issuance of National Pollutant Discharge Elimination System (NPDES) permits for new development, as applicable, including Storm Water Pollution Protection Plans (SWPPP) during construction, and Water Quality Management Plans (WQMP) post construction.	**Consistent.** As discussed in Section 4.9, *Hydrology and Water Quality,* the project would implement a SWPPP during construction and a WQMP post-construction, including BMPs to reduce impacts to water resources. The project would be consistent with Policy 2.1.2a.
Policy 2.3.2a: Require the installation of flow restriction fixtures in all new development.	**Consistent.** The project would comply with applicable standards and regulations of the California Green Building Standards Code (CALGreen; CCR Title 24, Part 11), which includes installation of low flow water fixtures. Therefore, the project would be consistent with Policy 2.3.2a.
Policy 2.5.1a: Encourage new construction and project design that uses, or takes advantage of renewable energy resources, including but not limited to solar energy design.	**Consistent.** As described in Section 2, *Project Description*, and Section 4.5, *Energy*, the project would include infrastructure for solar PV panel installation. Therefore, the project would be consistent with Policy 2.5.1a.
Policy 2.7.2.a: Require all new development to be in compliance with its respective National Pollutant Discharge Elimination System (NPDES) Permit and corresponding Water Quality Management Plan as applicable, and to not create a situation that would cause a violation of the City of Norco NPDES Permit.	**Consistent.** As discussed in Section 4.9, *Hydrology and Water Quality,* the project would implement a SWPPP during construction and a WQMP post-construction, including BMPs to reduce impacts to water resources. The project would be consistent with Policy 2.7.2a.
Policy 2.8.2: As part of the development review process for all development proposals, the City should require habitat and biological assessments in areas expected to contain significant or important plant and wildlife communities identifying species types and locations.	**Consistent.** A project-specific biological resources assessment was completed and is included in Appendix D; the results of which are discussed in Section 4.3, *Biological Resources*. Mitigation measures have been provided to reduce potential project impacts on sensitive species habitat (burrowing owl) and nesting birds to a less than significant. Therefore, the project would be consistent with Policy 2.8.2.

Policy	Project Consistency
Policy 2.8.3: The City should require development that has been found to have a potential adverse impact on sensitive species habitat to mitigate the potential impacts of proposed habitat changes.	**Consistent.** Project impacts on biological resources are discussed in Section 4.3, *Biological Resources*. Mitigation measures have been provided to reduce potential project impacts on sensitive species habitat (burrowing owl) and nesting birds to a less than significant. Therefore, the project would be consistent with Policy 2.8.3.
Policy 2.8.4a: Implement the requirements of the MSHCP for public and private development projects including the collection of mitigation fees.	**Consistent.** The project was determined to be consistent with applicable provisions of the MSHCP as stated in the project-specific biological resources (Appendix D) and in Section 4.3, *Biological Resources*. Therefore, the project would be consistent with Policy 2.8.4a.
Policy 2.8.4b: Comply with the "Other Plan Requirements" of the MSHCP including requirements for: Riparian/Riverine and Fairy Shrimp Habitat; Narrow Endemic Plants; Criteria Area Survey Species; and Urban/Wildlife Interface Guidelines.	**Consistent.** The project was determined to be consistent with applicable provisions of the MSHCP as stated in the project-specific biological resources (Appendix D) and in Section 4.3, *Biological Resources*. Therefore, the project would be consistent with Policy 2.8.4b.
Policy 2.8.4c: Employ Best Management Practices of the MSHCP in project siting and design for both public and private development projects.	**Consistent.** As stated in Section 4.3, *Biological Resources*, the project site is not located in a the MSHCP Criteria Area nor Core and Linkage areas. Although, the project site is within the Narrow Endemic Plant Species Survey Area and Burrowing Owl Survey Area for the MSHCP, neither have been identified on or adjacent to the project site (Appendix D). Therefore, project impacts to the MSHCP would be less than significant. The project would be consistent with Policy 2.8.4c.
Policy 2.8.6: Review all new development so as to remove only the minimal amount of natural vegetation as possible and require revegetation of graded areas with native plant species consistent with public safety requirements.	**Consistent.** As stated in Section 4.3, *Biological Resources*, the project site contains non-native vegetation that has been abated pursuant to City code. The proposed landscape plan shows that the project site would be landscaped to the greatest extent possible around common residential and commercial areas, as well as in proposed parking areas to provide shade cover and permeable surfaces, and along the project site perimeter. Therefore, the project would be consistent with Policy 2.8.6.
Policy 2.9.12: Encourage a mix of land uses around high-density projects to encourage walking for convenience items as opposed to vehicle trips.	**Consistent.** The project site is located in highly visible area of the City, in proximity to existing residential, commercial, and institutional uses. The placement of multi-family residential uses on the project site would encourage the use of alternative transportation (i.e., walking, cycling, horseback riding) between the project site and existing uses. The proposed food garden would enhance commercial activities in the vicinity. Therefore, the project is consistent with Policy 2.9.12.
Policy 2.9.15: In addition to compliance with the California Green Building Code requirements, encourage innovation in residential and non-residential design to further minimize ultimate consumption of energy and water resources including the development of green roofs.	**Consistent.** The project would comply with all applicable CALGreen (Title 24) Building Codes pertaining to energy efficiency, which would be verified by the City during the building permitting process. Proposed landscaping would include the installation of watering systems designed to be water efficient. Therefore, the project would be consistent with Policy 2.9.1.

Policy	Project Consistency
Policy 2.9.18: Encourage on-site composting and recycling of food scrap and paper waste materials for diversion from landfills.	**Consistent.** As described in Section 4.14, *Utilities and Service Systems*, all uses within the City are subject to the requirements of AB 939, and all projects in the City undergo development review and permitting, including a review to ensure compliance with waste reduction requirements. Therefore, the project would be consistent with Policy 2.9.1.8.
Housing Element	
Policy 4.4: Ensure that environmental, public infrastructure and traffic constraints are adequately addressed with regard to new residential development.	**Consistent.** Project-specific environmental studies and traffic impact assessment have been completed and included as appendices to this EIR. Section 4, *Environmental Impact Analysis*, discusses all project impacts. Therefore, the project would be consistent with Policy 4.4.
Policy 4.7: Encourage residential infill within existing neighborhoods to better utilize existing services and utilities and to reduce infrastructure development costs.	**Consistent.** The project site is surrounded by existing residential, commercial, industrial, and institutional uses. Much of the project site is vacant with exception of an existing RV sales lot in the northeast portion. Proposed uses include multi-family residential units that would provide a residential transition zone between proposed and existing commercial uses and existing residential uses. Proposed commercial uses and recreational amenities would enhance the agricultural/equestrian lifestyle in Norco. Therefore, the project would be consistent with Policy 4.7.
Policy 6.5: Encourage new residential development to include energy efficiency measures beyond the minimum standards of Title 24.	**Consistent.** As described in Section 2, *Project Description*, and Section 4.5, *Energy*, the project would incorporate energy efficiency features such as those related to the building envelope; heating, ventilating, and air conditioning; LED lighting; and power systems. Incorporation of these and additional features would ensure the project meets and exceeds Title 24 standards. Therefore, the project would be consistent with Policy 6.5.
Noise Element	
Policy 2.2.2a: New development projects near developed and occupied residential areas should be evaluated for possible submittal of a noise reduction plan prior to the issuance of grading permits.	**Consistent.** A project-specific noise report was completed and is included as Appendix K. As discussed in Section 4.11, *Noise*, construction or operation of the project would not result in significant impacts to residential areas. The project would be consistent with Policy 2.2.2a.
Policy 2.2.2b: All construction equipment should be equipped with noise attenuation features including mufflers and engine shrouds that are at least as effective as original manufacturer equipment.	**Consistent.** As stated above, project construction noise impacts are discussed in Section 4.11, *Noise*. The project would be consistent with Policy 2.2.2b.
Policy 2.2.7: The City should incorporate as feasible, measures to minimize noise impacts from commercial and industrial zones that are near residential areas.	**Consistent.** A project-specific noise report was completed and is included as Appendix K. As discussed in Section 4.11, *Noise*, construction or operation of the project would not result in significant impacts to existing residential areas. Construction activities would be prohibited between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday and 7:00 p.m. to 8:00 a.m., pursuant to Norco Municipal Code Section 9.07.020. Proposed noise-generating uses, such as live music, would not occur between 10:00 p.m. to 8:00 a.m., pursuant to Norco Municipal Code Section 9.07.060. The project would be consistent with Policy 2.2.7.

Policy	Project Consistency
Safety Element	
Policy 2.2.1a: Continue to require all new development to conform to the currently adopted Uniform Building Code and seismic safety regulations.	**Consistent.** Seismic hazards and applicable safety regulations are discussed in Section 4.6, *Geology and Soils*. The project would comply with the California Building Standards Code as a condition of construction permit approval, which would reduce seismic and geology-related hazards. Therefore, the project is consistent with Policy 2.2.1a.
Policy 2.3.1f: Endeavor to meet and maintain adequate fire response time for all residents and businesses.	**Consistent.** Project impacts on public services such as fire and police protection are discussed in Section 4.12, *Public Services*. The project site is located approximately 2.4 miles from Riverside County Fire Department Station 57, which would serve the project site, which would provide adequate fire protection services for the project Therefore, the project would be consistent with Policy 2.3.1f.
Policy 2.3.1i: Consider the needs of fire prevention and suppression during project review of development projects. These include, but are not limited to, providing adequate access to buildings, adequate separation between buildings, and adequate building setbacks from fuel modification areas. Fire suppression measures also include continued implementation of adopted fire and building codes (Title 15) pertaining to the installation of automatic fire extinguishing systems in new buildings.	**Consistent.** The project would include all fire related safety features pursuant to the California Fire Code as adopted in and pursuant to the City of Norco Municipal Code Chapter 15.09. Safety features would be verified by the Riverside County Fire Department during the City's building permitting process. Therefore, the project would be consistent with Policy 2.3.1j.
Policy 2.3.1j: The City Fire Department should provide input to the Planning Division for all developments that require site plan or subdivision review prior to hearings before official commissions or the City Council. Street and driveway widths shall be adequate to provide access to sites and buildings shall be configured to provide sufficient clearances for fire suppression and other emergency access needs.	**Consistent.** The project would include all fire related safety features pursuant to the California Fire Code as adopted in and pursuant to the City of Norco Municipal Code Chapter 15.09. Safety features would be verified by the Riverside County Fire Department during the City's building permitting process. Therefore, the project would be consistent with Policy 2.3.1j.
Policy 2.4.1j: During project review, require drainage studies (as needed) by a qualified engineer to certify that new development will be adequately protected, and that project development will not create new downstream flood hazards.	**Consistent.** A project-specific Preliminary Hydrology Study (Appendix I) and a WQMP (Appendix J) have been prepared and included in the project analysis and impact discussion pertaining to hydrology and water quality impacts. As discussed in Section 4.9, *Hydrology and Water Quality,* the project would not impede or redirect flood flows and would not create new downstream flood hazards. Therefore, the project would be consistent with Policy 2.4.1j.
Policy 2.4.1k: Require erosion and flood control improvements to be consistent with Regional Water Quality Control Board Best Management Practices (BMPs) and encourage the incorporation of natural landscaping and pervious surfaces in site design review.	**Consistent.** As discussed in Section 4.9, *Hydrology and Water Quality,* the project would implement a SWPPP during construction and a WQMP post-construction, including BMPs to reduce impacts to water resources. Therefore, the project would be consistent with Policy 2.4.1k.

Policy	Project Consistency
Policy 2.5.3b: Encourage and implement appropriate utilization of defensible space design concepts in new developments.	**Consistent.** Project impacts on wildfire hazards are discussed in Section 5.5, *Wildfire*. The project site is not located in or near a very High Fire Hazard Severity Zone. The project site is relatively flat and is surrounded by developed, urban landscape. The project would not include infrastructure that could exacerbate fire risks. Therefore, the project would be consistent with Policy 2.5.3b.

Source: City of Norco 1989, 2000, 2003, 2009, 2013a, 2013b, and 2014

Norco Auto Mall Specific Plan

The entire project site is located in Area A of the Norco Auto Mall Specific Plan, which permits new automobile dealerships and accessory uses as an integral part of the operation of a new automobile dealership. Other uses as permitted by the underlying C-G zone may be allowed upon approval of a CUP (discussed below). The 2014-2012 Housing Element amended the Norco Auto Mall Specific Plan to add the HDO to the three parcels that comprise the project site. As proposed, the project would be consistent with applicable Norco Auto Mall Specific Plan policies, as detailed below in Table 4.10-6. Therefore, the project would have a less than significant impact.

Table 4.10-6 Project Consistency with Applicable Norco Auto Mall Specific Plan Policies

Policy	Project Consistency
Policy 40.7: Design theme of buildings, landscaping, and all site improvements shall be integrated to comprise a unified motif throughout the project area.	**Consistent.** Project aesthetics are analyzed and discussed in Section 4.1, *Aesthetics*. The proposed structures for the food garden and hotel would have a western theme to reinforce the City's equestrian lifestyle pursuant to General Plan Land Use Element Policy 2.4.1a. Therefore, the project would be consistent with Policy 40.7.
Policy 40.11: The maximum degree of flexibility, consistent with the type of development and protection desired, shall be provided in order to encourage imaginative design and management.	**Consistent.** The project entails development of a mixed-use project that would provide residential uses consistent with the HDO and commercial uses consistent with the underlying C-G zone. Proposed uses would not contain automobile dealership and accessory uses, as envisioned in the Norco Auto Mall Specific Plan. However, the Norco Auto Mall Specific Plan permits proposed uses with a CUP; and proposed uses are aligned with the City's overall goals of meeting RHNA, providing visitor- and community-serving amenities that enhance the equestrian lifestyle, and supporting economic growth within the City. Therefore, the project would be consistent with Policy 40.11.
Policy 120.1: Direct access to the Specific Plan area will be provided by Hamner Avenue, Second, and Third Streets.	**Consistent.** As described in Section 2, *Project Description*, and shown in the project site plan, primary access to the project site would be provided from Hamner Avenue, and secondary access would be provided from Third Street. The project site plan and conceptual landscape plan show that the proposed access points and driveways would be fully landscaped to increase visibility from Hamner Avenue and Third Street while providing an attractive entry way for project residents and visitors. Therefore, the project would be consistent with Policy 120.1.
Policy 120.3: No equestrian trails will be constructed in the auto mall area except for a trail within the south parkway area of Third Street. A minimum six-foot-high masonry wall shall be constructed separating the trail form the dealership. Access to Third Street will be secondary and designed for service vehicles only.	**Consistent.** The project would include development of an equestrian trail for use by the Norco community, which would be located along the frontage of Third Street and most of Hamner Avenue, around the perimeter of the food garden, with a connection to an existing off-site equestrian trail on Mountain Avenue as described in Section 2, *Project Description*. The provision of a horse paddock and equestrian trail on the project site would encourage the use of the existing Class I equestrian trail along Third Street to access the proposed food garden and outdoor amenities. The proximity of the project site to existing residential, commercial, and institutional uses would encourage active transportation use by future project residents as well as by Norco residents accessing the proposed food garden and recreational amenities. Therefore, the project would be consistent with Policy 120.3.

Source: City of Norco 2018b

City of Norco Municipal Code (C-G Zone and HDO)

Approximately 7.6 acres of the project site would be developed with visitor-serving commercial uses (proposed food garden and hotel). The C-G allows for a variety of commercial uses. However, the proposed food garden, hotel, and outdoor recreational amenities require a CUP, pursuant to the City of Norco Municipal Code Chapter 18.29.20. Therefore, the project would be consistent with the underlying C-G zone and the Norco Auto Mall Specific Plan and would require a CUP processed along with the HDO site plan.

As previously stated, the HDO allows high-density (20-30 units per acre; or 35 units per acre if a density bonus is utilized) affordable housing and allows for a mixture of residential and non-residential development. The General Plan 2014-2021 Housing Element states that approximately 184 units can be accommodated on the project site assuming a density of 20 dwelling units per acre for approximately 50 percent of the site.

City of Norco Municipal Code Chapter 18.64 describes that after the City's lower income regional housing needs allocation (RHNA) requirement has been met, any remaining acreage may be identified for the development as permitted by the underlying zone. All parcels within the HDO must meet the requirements for residential development before nonresidential uses, as permitted in the underlying zoning, are allowed. The project proposes to utilize 11.3 acres of the project site for 320 residential units, which would result in a project density of approximately 29 dwelling units per acre.

The General Plan 2014-2021 Housing Element identifies five development sites to accommodate the City's RHNA allocation. The Housing Element states that each of the five identified HDO sites will accommodate residential densities of up to 30 dwelling units per acre, which is consistent with the default density required to accommodate lower income housing. The project could provide a maximum of 573 residential units if 19.1 acres were to be developed with residential units at 30 dwelling units per acre.

Since adoption of the 2014-2021 Housing Element, Site 4 (located at Fifth Street and Horseless Carriage Drive) has been developed with non-residential uses and is no longer available for lower income housing. In addition, Site 5 (the Mountain View project site located along Mountain Avenue between Second and First Streets) has been proposed for industrial uses (SCH No. 2019039132); therefore, the 224 units projected in the Housing Element for Site 5 will not be developed. The project proposes 320 residential units which meets and exceeds the requirements of the HDO for Site 2 and would allow the City to accommodate the 136 units that would not be constructed at Sites 4 and 5. Therefore, the project would be consistent with the HDO, and the project would have a less than significant impact.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.10.4 Cumulative Impacts

Cumulative development in the City and the surrounding area would modify existing land use patterns through the development of vacant lots or through redevelopment. The planned and pending projects in the area of the project, listed in Table 3-1 of Section 3, *Environmental Setting*, include about 30 projects consisting of residential, retail, warehouse, office, institutional, recreational, and industrial related land uses. Projects in the immediate vicinity of the project site include a 90-room hotel project (Hamner Avenue and Fifth Street), an automobile sales facility and lot (Second Street and Valley View Avenue), and a cold storage warehouse and industrial park (Second Street and Pacific Avenue). Cumulatively, the project does not physically divide an established community or area in the City when considered alongside nearby cumulative projects.

Similar to the project, land use regulations and policy consistency impacts associated with other cumulative projects would be addressed on a case-by-case basis in order to determine their consistency with applicable plans and policies. The project would be consistent with the underlying land use regulations and policies upon approval of the necessary land use entitlements. Therefore, the project would have no impact to cumulative land use impacts.

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4.11 Noise

This section analyzes the project's potential noise impacts. The analysis contains a description of the existing noise setting, and a discussion of both the temporary noise impacts related to construction activity and long-term impacts associated with project operations.

The analysis is based on the Noise and Vibration Study prepared by Rincon Consultants, Inc. (2020), and is included in Appendix K. The Noise and Vibration Study is based on noise measurements collected at the project site on February 7, 2020; analytical modeling of project construction and operational noise; and comparison of modeling results against applicable noise and vibration thresholds.

4.11.1 Setting

a. Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dBA; reducing the energy in half would result in a 3 dBA decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (eight times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading

of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2018). Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest sound pressure level within the sampling period, and L_{min} is the lowest sound pressure level within the measuring period (Crocker 2007).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours; it is also measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013a). Noise levels described by L_{dn} and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the L_{dn}/CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60-plus CNEL range. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

b. Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from

vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in./sec.). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

c. Existing Noise Setting

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The City of Norco General Plan Noise Element defines noise sensitive receivers as hospitals, residences, convalescent homes, schools, churches, sensitive wildlife habitat, and the small plot agriculture/animal keeping/equestrian lifestyle (City of Norco 2003). Noise sensitive receivers near the site include single-family residences to the south and west.

Vibration sensitive receivers are similar to noise sensitive receivers, such as residences, and institutional uses, such as schools, churches, and hospitals. However, vibration sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment, affected by levels that may be well below those associated with human annoyance.

Project Noise Setting

The most common source of noise in the project site vicinity is vehicular traffic from Third Street and Hamner Avenue. The nearest sensitive receivers to the project site are single-family residences to the south and west.

To characterize ambient sound levels at and near the project site, three 15-minute sound level measurements were conducted on February 7, 2020, and one 24-hour measurement was conducted on February 7 through 8, 2020. Noise Measurement (NM) 1 was taken near the northern project boundary to ascertain noise levels from Third Street; NM 2 was taken to capture the noise levels off Hamner Avenue; and NM3 was taken to capture the ambient noise level within the approximate center of the project site. The 24-hour measurement was placed near NM 1 to capture roadway noise levels throughout the course of a day. Table 4.11-1 and Table 4.11-2 summarize the results of the noise measurements, and Table 4.11-3 shows the recorded traffic volumes from NM 1 and NM 2. Detailed sound level measurement data are included in Appendix K.

Table 4.11-1 Project Site Noise Monitoring Results – Short Term

Measurement Location	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L_{eq} (dBA)	L_{max} (dBA)
NM 1	Northern portion of project site, adjacent to Third Street	11:01 - 11:16 a.m.	Approximately 50 feet to centerline of Third Street	62	71
NM 2	Eastern boundary of project site, adjacent to Hamner Avenue	11:22 – 11:37 a.m.	Approximately 50 feet to centerline of Hamner Avenue	72	80
NM 3	Approximate center of project site	11:47 a.m. – 12:02 p.m.	Approximately 500 feet to centerline of Hamner Avenue	48	58

Source: Rincon Consultants, Inc. 2020 (Appendix K)

Table 4.11-2 Project Site Noise Monitoring Results – Long Term

Sample Time	dBA L_{eq}	Sample Time	dBA L_{eq}
LT1 – Northern Boundary of Project Site, Adjacent to Third Street, February 6-7, 2020			
12:28 p.m.	64	12:28 a.m.	60
1:28 p.m.	67	1:28 a.m.	57
2:28 p.m.	65	2:28 a.m.	57
3:28 p.m.	65	3:28 a.m.	56
4:28 p.m.	66	4:28 a.m.	60
5:28 p.m.	63	5:28 a.m.	61
6:28 p.m.	66	6:28 a.m.	63
7:28 p.m.	62	7:28 a.m.	65
8:28 p.m.	62	8:28 a.m.	69
9:28 p.m.	66	9:28 a.m.	62
10:28 p.m.	66	10:28 a.m.	61
11:28 p.m.	59	11:28 a.m.	62
24-hour Noise Level			**64**

Note: Field measurements conducted on February 6 and 7, 2020, using ANSI Type II Integrating sound level meter.

Source: Rincon Consultants, Inc. 2020 (Appendix K)

Table 4.11-3 Sound Level Monitoring Traffic Counts

Measurement	Roadway	Traffic	Autos[1]	Medium Trucks[2]	Heavy Trucks[3]
NM 1	Third Street	15-minute count	165	1	0
		One-hour Equivalent	660	4	0
Percent			**99%**	**1%**	**0%**
NM 2	Hamner Avenue	15-minute count	575	10	3
		One-hour Equivalent	2,300	40	12
Percent			**97%**	**2%**	**1%**

Note: Detailed sound level measurement data are included in Appendix K.

[1] Automobiles: all vehicles with two axles and four tires – primarily designed to carry nine or fewer people (passenger cars, vans) or cargo (vans, light trucks) – generally with gross vehicle weight less than 4,500 kg (9,900 lbs).

[2] Medium trucks: all cargo vehicles with two axles and six tires – generally with gross vehicle weight between 4,500 kg (9,900 lbs) and 12,000 kg (26,400 lbs).

[3] Heavy trucks: all cargo vehicles with three or more axles – generally with gross vehicle weight more than 12,000 kg (26,400 lbs).

Source: Rincon Consultants, Inc. 2020 (Appendix K)

4.11.2 Regulatory Setting

a. State

California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. California law requires each county and city to adopt a General Plan that includes a Noise Element prepared based on guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. CEQA requires known environmental effects of a project be analyzed, including environmental noise impacts.

California Building Code

CCR Title 24, Building Standards Administrative Code, Part 2, and the California Building Code codify the state noise insulation standards. These noise standards apply to new construction in California to control interior noise levels as they are affected by exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such sources create an exterior noise level of 60 dBA CNEL or higher.

The 2016 State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within the noise contour of an airport, freeway, or railroad. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable levels. Table 4.11-4 specifies the levels for new residential buildings, schools, and hospitals to satisfy the acceptable interior noise limit for new construction of 45 dBA CNEL.

If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available, and the noise level exceeds 65 dBA L_{eq} for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1). Alternatively, if the interior noise levels of non-residential buildings satisfy the performance criteria of 50 dBA L_{eq} (one hour), then the performance method defined by the California's Green Building Standards can be used.

Table 4.11-4 California Building Code Interior Noise Standards

Land Use Category	Exterior Noise Level where Noise Study is Required (dBA CNEL)	Interior Noise Level Limit (dBA CNEL)
Residential, schools, and hospitals	60	45
Non-residential	65	50

Source: California Building Standards Commission 2017

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, indicate acceptable, specific land use types in areas with specific noise exposure. The guidelines also offer adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. These guidelines are advisory, and local jurisdictions, including the Eastvale, have the responsibility to set specific noise standards based on local conditions. Please refer to the discussion below, under the Norco General Plan Noise Element, for the compatibility guidelines adopted by Norco.

b. Local

City of Norco General Plan

The City of Norco General Plan Noise Element was adopted in 2003. The goal and policies of the General Plan Noise Element are intended to protect sensitive land uses and citizens form other more intensive land uses, and from point sources that produce high noise levels. The General Plan Noise Element contains a noise compatibility matrix consistent with State guidelines (shown in Table 4.11-5), which summarizes recommended criteria for assessing the compatibility of noise sources and receivers. The noise compatibility matrix identifies the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses. For multi-family and hotel land uses, ambient noise levels up to 65 CNEL are considered normally acceptable and ambient noise levels up to 70 CNEL are considered conditionally acceptable. The General Plan Noise Element also lists the interior noise standard for residential areas as 45 CNEL.

Table 4.11-5 Land Use/Noise Compatibility Matrix (CNEL)

Land Use Categories	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential: low density, single family, duplex, mobile homes	<60	55-70	70-75	>75
Residential: multi-family	<65	60-70	70-75	>75
Transient lodging: motels, hotels	<65	60-70	70-80	–
Schools, libraries, churches, hospitals, nursing homes	<70	60-70	70-80	>80
Auditoriums, concert halls, amphitheaters	–	<70	>65	–
Sports areas, outdoor spectator sports	–	<75	>70	–
Playgrounds, neighborhood parks	<70	–	67-75	>73
Gold courses, riding stables, water recreation, cemeteries	<75	–	70-80	>80
Office buildings, business, commercial, professional offices	<70	67-73	>75	–
Industrial, manufacturing, utilities, agriculture	<75	70-80	>75	–

Note: Adapted from City of Norco General Plan Noise Element, Table 3.8, *Land Use Compatibility*.
Source: City of Norco 2003

City of Norco Municipal Code

The City's Noise Ordinance, Norco Municipal Code Chapter 9.07, sets forth regulations concerning the generation and control of noise. Norco Municipal Code Section 9.07.020 exempts construction noise for private construction projects located within a quarter mile of an inhabited dwelling provided that construction does not occur between 7:00 p.m. and 7:00 a.m. Monday through Friday or 7:00 p.m. and 8:00 a.m. on Saturday and Sunday. In addition, Norco Municipal Code Section 15.30.020 states that construction activity, including the loading and unloading of materials, shall not occur before 6:30 a.m. or after 7:00 p.m. on weekdays.

Norco Municipal Code Section 9.07.040 sets exterior noise standards of various land uses for occupied property in the City. The exterior sound level for residential land uses is 55 dBA L_{max} from 7:00 a.m. to 10:00 p.m. and 45 dBA L_{max} from 10:00 p.m. to 7:00 a.m. For nearby institutional uses such as the Norco College, the public facility exterior sound levels would apply of 65 dBA L_{max} from 7:00 a.m. to 10:00 p.m. and 45 dBA L_{max} from 10:00 p.m. to 7:00 a.m.

Because the noise standards discussed above do not have a quantitative standard for construction noise, the FTA Transit Noise and Vibration Impact Assessment (2018) criteria are used. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period.

Norco Municipal Code Section 9.07.060 of the City Municipal Code lists standards for "special sound sources":

- Sound Amplifying Equipment and Live Music. No person shall install, use or operate sound amplifying equipment, or perform, or allow to be performed, live music unless such activities comply with the following requirements. To the extent that these requirements conflict with

any conditions of approval attached to an underlying land use permit, these requirements shall control:

  - Sound amplifying equipment or live music is prohibited between the hours of 10:00 p.m. and 8:00 a.m.
  - Sound emanating from sound amplifying equipment or live music at any other time shall not be audible to the human ear at a distance greater than 100 feet from the equipment or music.

- Power Tools and Equipment. No person shall operate any power tools or equipment between the hours of 10:00 p.m. and 8:00 a.m. such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than 100 feet from the power tools or equipment.

Norco Municipal Code Section 18.23.26 and 18.17.30 states that all air conditioning equipment shall be so designed and located so as to be architecturally integrated into the design of the building being served and transmit no noise or vibration to adjacent properties, insofar as practicable. Furthermore, such equipment shall be screened from view from adjacent properties or public street by use of landscaped screens, walls or other devices; and such screening shall consider the view of air conditioning equipment from adjacent multi-story building. Determination of the adequacy of screening shall be made at the time of site plan review.

4.11.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states noise impacts of the project would be significant if the project would:

1. Generate of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
2. Generate of excessive groundborne vibration or groundborne noise levels;
3. For a project located within the vicinity of a private airstrip or an airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

b. Methodology

Construction Noise

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FHWA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project area, exposing surrounding sensitive receivers to increased noise levels. The project would involve site preparation, grading, building construction, paving, and architectural coating. Construction noise would typically be higher during the heavier periods of initial construction (i.e., grading) and would be lower during the later construction phases. Typical heavy construction equipment during project grading could include dozers, excavators, loaders, scrapers, and graders. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

A potential construction scenario includes a dozer and a loader working to grade the site. Therefore, a dozer and a loader were analyzed together for construction noise impacts due to their likelihood of being used in conjunction at the same time and therefore a conservative scenario for the greatest noise generation during construction. At a distance of 100 feet, a dozer and a loader would generate a noise level of 73.6 dBA L_{eq} (RCNM calculations are included in Appendix K).

Groundborne Vibration

Operation of the project would not include any substantial vibration sources. Thus, construction activities would have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading and excavation of the project site. The greatest vibratory source during construction would be a dozer. Neither blasting nor pile driving would be required for construction of the proposed project. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020, FTA 2018). Table 4.11-6 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 4.11-6 Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 ft. (in./sec.)
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

Source: FTA 2018

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such as blasting, pile-driving, vibratory compaction, demolition, drilling, and excavation, are based on information contained in Caltrans' *Transportation and Construction Vibration Guidance Manual* and the Federal Transit Administration and the FTA *Transit Noise and Vibration Impact Assessment Manual* (Caltrans 2020; FTA 2018). Maximum recommended vibration

limits by the American Association of State Highway and Transportation Officials (AASHTO) are identified in Table 4.11-7.

Table 4.11-7 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in./sec.)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

Based on AASHTO recommendations, limiting vibration levels to below 0.2 PPV in./sec. at residential structures would prevent structural damage regardless of building construction type. These limits are applicable regardless of the frequency of the source. However, as shown in Table 4.11-8 and Table 4.11-9 potential human annoyance associated with vibration is usually different if it is generated by a steady state or a transient vibration source.

Table 4.11-8 Human Response to Steady State Vibration

PPV (in./sec.)	Human Response
3.6 (at 2 Hz)–0.4 (at 20 Hz)	Very disturbing
0.7 (at 2 Hz)–0.17 (at 20 Hz)	Disturbing
0.10	Strongly perceptible
0.035	Distinctly perceptible
0.012	Slightly perceptible

Source: Caltrans 2020

Table 4.11-9 Human Response to Transient Vibration

PPV (in./sec.)	Human Response
2.0	Severe
0.9	Strongly perceptible
0.24	Distinctly perceptible
0.035	Barely perceptible

Source: Caltrans 2020

As shown in Table 4.11-8, the vibration level threshold at which steady vibration sources are considered to be distinctly perceptible is 0.035 in./sec. PPV. This is roughly equivalent to the FTA identified threshold of 78 VdB for assessing impacts to residential land uses from infrequent events. This threshold is used for assessing passing trains in the FTA Manual. However, as shown in Table 4.11-9, the vibration level threshold at which transient vibration sources (such as construction equipment) are considered to be distinctly perceptible is 0.24 in./sec. PPV. This is roughly equivalent

to 94 VdB. This analysis uses the distinctly perceptible threshold for purposes of assessing vibration impacts.

Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors and the vibration level threshold for human perception is assessed at occupied structures (FTA 2018). Therefore, vibration impacts are assessed at the structure of an affected property.

Operational Noise Sources

Live Events

As part of the food garden area, the project would have community gatherings, farmers markets and food stands, stage for live performances, artist exhibit area, bocce courts and lawn game areas, open space park, and horse paddock. The main noise-generator these proposed outdoor entertainment and recreation components would be use of the entertainment stage where live music may be performed by bands or other amplified sound would occur. While these events would primarily occur at the performing stage in a central area of the food garden, they may also occur at the open park area proposed at the southern portion of the food garden area. As the proposed park area is closest to off-site noise-sensitive receivers and less shielded by food garden buildings, live music noise was modeled at this location to provide a conservative estimate for operational noise impacts.

The Noise Navigator Sound Level Database lists over 1,700 measurement values for occupational, recreational, and military noise sources, including over a dozen measurements for concerts (3M Personal Safety Division 2015). The musicians measured include a mix of rock and pop concerts. The anticipated live music noise at the project site would be on a smaller scale in terms of equipment and speakers than the major concert venues measured and would also be for a family-oriented audience (i.e., heavy guitars and loud vocals from a rock concert would not be anticipated). Therefore, the value for a relatively mellow artist, Judy Collins, was chosen for the model of 80 dBA at a distance of 25 meters (82 feet). This represents a sound power level (SPL) of 115.9 dBA at the stage. This was modeled as three separate speakers with a combined SPL of 115.9 dBA located on the two sides of the stage and one at the back of the stage.

Mechanical Equipment

The primary mechanical equipment noise generator from the project would be heating, ventilation, and air conditioning (HVAC) units. The unit used in this analysis is a 5-ton Carrier 38HDR060 split system condenser (manufacturer's specifications included in Appendix K), and units were assumed to be located on the rooftops of each residential unit and commercial building. The hotel was assumed to contain 24 HVAC units based upon one ton of HVAC per 600 sf of building space. The manufacturer's noise data lists the unit as having a sound power level of 72.0 dBA.

Traffic Noise

Noise levels affecting the proposed project site would be primarily influenced by traffic noise from Hamner Avenue and Third Street. Future noise levels affecting the compatibility of the project site were estimated using the FHWA's Traffic Noise Model (TNM) traffic noise-reference levels and algorithms from SoundPLAN. Traffic noise-model inputs to SoundPLAN include the three-dimensional coordinates of the roadways, noise receivers, and topographic features or planned

barriers that would affect noise propagation; vehicle volumes and speeds, by type of vehicle; and absorption factors.

Hamner Avenue is a four-lane roadway with a posted speed limit of 40 miles per hour (mph). Third Street is a four-lane roadway with a posted speed limit of 35 mph. Traffic volumes used for the noise analysis are shown in Table 4.11-10. The traffic counts used average daily trips (ADT) information provided in the project's traffic report (Urban Crossroads 2020).

Table 4.11-10 Existing and Future Traffic Volumes

	Traffic Counts (Average Daily Trips)					
Roadway/Segment	**Existing**	**Existing + Project**	**Opening Year Cumulative (2023)**	**Opening Year Cumulative (2023) + Project**	**Horizon Year 2040**	**Horizon Year 2040 + Project**
Third Street						
Windy Way to Project Driveway 1	7,200	7,200	7,800	7,800	10,900	10,900
Project Driveway 1 to Hamner Avenue	9,800	10,700	10,500	11,500	23,200	24,200
Hamner Avenue to Interstate 15	3,800	3,900	4,100	4,300	6,800	7,000
Hamner Avenue						
Fourth Street to Third Street	40,500	41,400	45,200	46,200	49,800	50,700
Third Street to Project Driveway 2	31,800	42,300	46,700	47,400	54,300	55,000
Project Driveway 2 to Second Street	41,400	44,000	46,800	49,100	54,400	56,800

Source: Urban Crossroads 2020 (Appendix L)

To determine the vehicle classification mix for modeling, the mix observed during the site visit as shown in Table 4.11-3 was used for Third Street and Hamner Avenue. Peak hour traffic was assumed to be 10 percent of the ADT. For the purposes of modeling, the peak hour traffic volume was inputted into the model to determine the peak hour L_{eq}. The CNEL is estimated to be equivalent to the peak hour L_{eq} when the peak hour is 10 percent of ADT.

Exterior traffic noise levels at the residential building façades of the 1st through 3rd floors and the hotel building façades of the 1st through 4th floors were calculated, with the first floor receivers placed at 5 feet above ground level and second through fourth floor receivers placed at 15 feet, 25 feet, and 35 feet above ground level, respectively.

Model Calibration

The measured noise levels (Table 4.11-1) were compared to a modeled noise level in SoundPLAN, using the observed traffic counts for model calibration (Table 4.11-4). Modeled noise within 3 dBA or less from the measured level is considered sufficiently accurate without adjustment. The modeled noise values for NM 1, NM 2, and NM 3 were 60, 69, and 51 dBA L_{eq}, respectively. The modeled noise value for NM 1, NM 2, and NM 3 are within 2 dBA, 3 dBA, and 3 dBA of the measured values, respectively. Therefore, the modeled noise levels are considered sufficiently accurate without adjustment.

c. Project Impacts and Mitigation Measures

Threshold 1:	Would the proposed project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

IMPACT N-1 CONSTRUCTION OF THE PROJECT WOULD TEMPORARILY INCREASE NOISE LEVELS, INCLUDING AMBIENT NOISE, BUT NOISE LEVELS WOULD NOT EXCEED STANDARDS ESTABLISHED BY THE CITY. AMBIENT NOISE ON THE PROJECT SITE AND VICINITY WOULD INCREASE FROM ON SITE ACTIVITIES AND INCREASED TRAFFIC AND INCREASE AMBIENT NOISE, BUT OPERATIONAL NOISE INCREASES WOULD NOT EXCEED STANDARDS ESTABLISHED BY THE CITY. TEMPORARY CONSTRUCTION AND LONG-TERM OPERATIONAL ACTIVITIES WOULD RESULT IN A LESS THAN SIGNIFICANT IMPACT.

The project-specific noise analysis focused on the construction and operational impacts to determine if the project would expose persons to or generate noise levels in excess of established standards or cause a substantial permanent increase in ambient noise levels in the project vicinity (Appendix K).

Construction

Over the course of a typical construction day, construction equipment would be located as close as 25 feet to the nearest residential structures to the south and west but would typically be located at an average distance further away due to the nature of construction where equipment is mobile throughout the day. Therefore, it is conservatively assumed that over the course of a typical construction day the construction equipment would operate at an average of 100 feet from the nearest residential structures.

As described above in the construction analysis methodology, at a distance of 100 feet, a dozer and loader would generate a noise level of 73.6 dBA L_{eq} (8-hour). The approximate 80 dBA L_{eq} (8 hour) noise contour for project construction would be approximately 50 feet (i.e., if construction averages 50 feet or greater throughout an 8-hour construction day, it would not exceed the FTA threshold). Therefore, construction noise levels with this equipment would not exceed the FTA construction noise threshold of 80 dBA L_{eq} (8-hour) at residential land uses. Other construction activities, such as building construction, would be anticipated to use equipment of intensity similar to or less than the simultaneous use of a dozer and loader. In addition, construction would occur within the allowed hours pursuant to Norco Municipal Code Section 15.30.020. Therefore, project construction activities would result in less than significant impacts.

Operation

The project would introduce sources of operational noise to the site, including mechanical equipment (HVAC units) and live music noise. Assumptions for these sources are discussed above in the description of anticipated operational noise sources. Noise levels at the nearest properties from each noise source and their combined noise levels are shown in Table 4.11-11. Receiver locations and daytime operational noise level contours are shown on Figure 4.11-1. In accordance with City of Norco Municipal Code Section 9.07.060, live music and sound amplifying equipment would not occur between 10:00 p.m. to 8:00 a.m. Therefore, the live music noise and combined noise levels only apply to the City noise thresholds between 7:00 a.m. to 10:00 p.m. As shown in Table 4.11-11, during the hours of 7:00 a.m. to 10:00 p.m. when live music noise and HVAC noise may be occurring

simultaneously, noise levels would not exceed the residential noise limit of 55 dBA L_{max} or the public facilities noise limit of 65 dBA L_{max}.

Table 4.11-11 Operational Noise Levels at Off-site Receivers

Receiver	Description	dBA L_{max}			Exceed Threshold?[1,2]
		HVAC	Music	Combined	
OFF1	Paddock Lane Residence	35	39	39	No
OFF2	Paddock Lane Residence	36	39	39	No
OFF3	Paddock Lane Residence	36	43	43	No
OFF4	Paddock Lane Residence	37	42	42	No
OFF5	Paddock Lane Residence	37	40	40	No
OFF6	Paddock Lane Residence	36	40	40	No
OFF7	Paddock Lane Residence	35	42	42	No
OFF8	Paddock Lane Residence	35	40	40	No
OFF9	Mountain Ave Residence	35	40	40	No
OFF10	Mountain Ave Residence	36	44	44	No
OFF11	Mountain Ave Residence	34	38	38	No
OFF12	Norco College – STEM Center	36	56	56	No
OFF13	John F. Kennedy Middle College High School	32	52	52	No

[1] The applicable threshold for residential uses is 55 dBA L_{max} from 7:00 a.m. to 10:00 p.m. and 45 dBA L_{max} from 10:00 p.m. to 7:00 a.m.; the applicable threshold for public facilities is 65 dBA L_{max} from 7:00 a.m. to 10:00 p.m. and 45 dBA L_{max} from 10:00 p.m. to 7:00 a.m.

[2] In accordance with City Municipal Code Section 9.07.060, live music and sound amplifying equipment would not occur between 10:00 p.m. to 8:00 a.m. Therefore, the live music noise and combined noise levels only apply to the daytime thresholds described above.

Source: Rincon Consultants, Inc. 2020 (Appendix K)

Figure 4.11-1 Operational Noise Level Contours

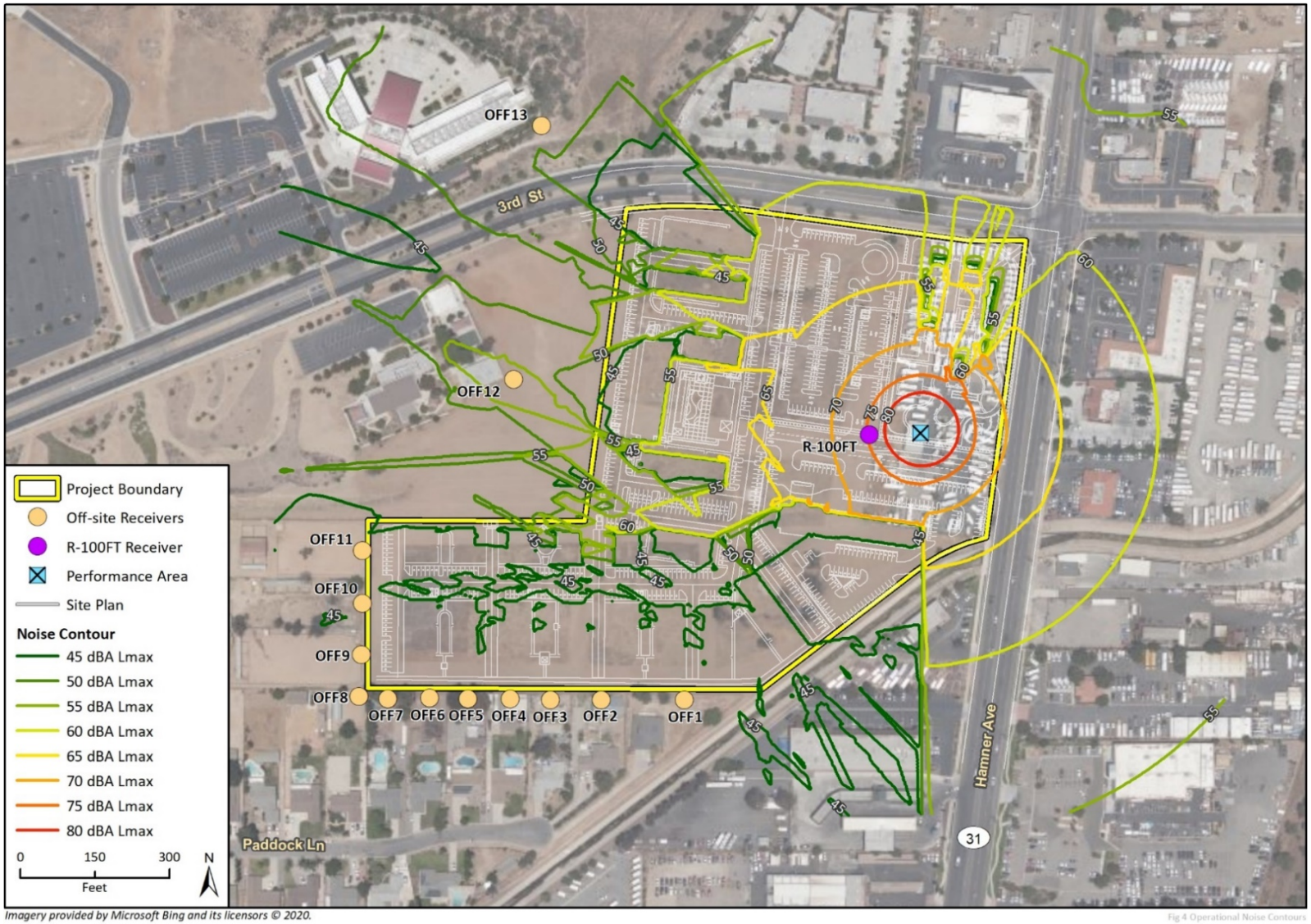

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Fig 4 Operational Noise Contours

Table 4.11-12 Off-site Project Traffic Noise Increases (dBA_{Leq})

Roadway/Segment	Existing	Existing + Project	Increase	Opening Year Cumulative (2023)	Opening Year Cumulative (2023) + Project	Increase	Horizon Year 2040	Horizon Year 2040 + Project	Increase
Third Street									
Windy Way to Project Driveway 1	61	61	<1	61	61	<1	63	63	<1
Project Driveway 1 to Hamner Avenue	62	62	<1	62	63	1	66	66	<1
Hamner Avenue to Interstate 15	58	58	<1	58	58	<1	60	61	1
Hamner Avenue									
Fourth Street to Third Street	70	70	<1	71	71	<1	71	71	<1
Third Street to Project Driveway 2	69	70	1	71	71	<1	71	71	<1
Project Driveway 2 to Second Street	70	71	1	71	71	<1	71	72	1

Source: Rincon Consultants, Inc. 2020 (Appendix K)

During the hours of 10:00 p.m. to 7:00 a.m., HVAC noise would not exceed the residential and public facilities noise limit of 45 dBA L_{max}. Therefore, operational noise from the project would not exceed limits at off-site noise-sensitive receivers; operational project noise impacts would be less than significant.

The City of Norco Municipal Code also states that sound emanating from sound amplifying equipment or live music shall not be audible to the human ear at a distance greater than 100 feet from the equipment or live music noise. The ambient noise level is assumed to be 62 dBA, which is the quietest hour during potential live music noise hours in the 24-hour measurement taken in Table 4.11-2. Audible is determined as 3 dBA greater (a barely perceptible noise increase) over the ambient noise level. Noise at a receiver 100 feet from the live music noise (which at that distance would only occur on property or within a nearby roadway) is provided as R-100FT on Figure 4.11-1. Due to the close distance to amplified music, noise levels at this receiver would be approximately 76 dBA L_{max}. While the project's live music noise would be audible to the human ear at a distance of 100 feet, the live music noise level would only exceed the ambient noise levels within the project site itself or within adjacent roadways; the live music noise would not exceed the City's Municipal Code property line thresholds at adjacent receivers, as shown in Table 4.11-11. Therefore, impacts would be less than significant.

Off-site Traffic Noise

The project would generate new vehicle trips that would use area roadways. The traffic noise increases caused by project traffic are shown in Table 4.11-12. As shown in the table, the greatest noise increase is 1 dBA L_{eq}, with most increases less than 1 dBA L_{eq}. Therefore, the project's traffic noise increases would not exceed 3 dBA, a noticeable noise increase, and impacts would be less than significant.

Land Use Compatibility

Following the methodology discussed above for operational noise sources, noise levels at the project's future exterior use, residences, and hotel areas were modeled using the Horizon Year 2040 + Project traffic scenario. The receivers were placed at a portion of the residential, hotel, and outdoor areas closest to the nearby roadways. Building façade noise levels were modeled at ground-level and at the potential 2nd through 3rd floors of the residences and 2nd through 4th floors of the hotels, as shown in Table 4.11-13 as Receivers ON3 through ON14; shared exterior use areas are shown as ON1 and ON2. Receiver locations are shown on Figure 4.11-2. As shown in Table 4.11-13, exterior noise levels from traffic noise at the potential exterior areas would not exceed 65 CNEL. Therefore, noise levels at exterior use areas of the project would not exceed the City's 65 CNEL normally acceptable exterior noise standard and would not conflict with the General Plan Noise Element.

Standard construction techniques for wood-frame construction buildings required under the California Building Code typically achieve a minimum 25 dBA reduction from exterior sources at interior locations when the windows are in a closed position. Therefore, if residential or hotel building façade noise levels exceed 70 CNEL, interior noise levels for the project would potentially exceed the City's residential interior noise standard of 45 CNEL.

As shown in Table 4.11-13, building façade noise levels do not exceed 70 CNEL at the project's hotel and residential locations. Therefore, interior noise levels at these lots would not conflict with the City's interior noise standard of 45 CNEL.

Table 4.11-13 Off-site Traffic Noise Levels Perceived on Project Site

Receiver[1]	Description	Noise Level (CNEL) Ground Level/ 1st Floor	2nd Floor	3rd Floor	4th Floor	Exceed Exterior Standard[2]	Exceed Interior Standard[3]
ON1	Saloon Area	57	N/A	N/A	N/A	No	No
ON2	Park Area	61	N/A	N/A	N/A	No	No
ON3	Hotel, facing Hamner Ave	60	64	64	64	No	No
ON4	Hotel, facing Third St	51	57	59	60	No	No
ON5	Hotel, facing south	52	56	58	58	No	No
ON6	Residential Building	52	56	58	N/A	No	No
ON7	Residential Building	48	51	52	N/A	No	No
ON8	Residential Building	47	51	53	N/A	No	No
ON9	Residential Building	49	53	55	N/A	No	No
ON10	Residential Building	48	52	54	N/A	No	No
ON11	Residential Building	47	51	52	N/A	No	No
ON12	Residential Building	51	55	57	N/A	No	No
ON13	Residential Building	54	57	58	N/A	No	No
ON14	Residential Building	61	62	62	N/A	No	No

[1] See Figure 4.11-2 for receiver locations.

[2] The applicable exterior noise standard for multi-family residential uses and hotel uses is 65 CNEL.

[2] The applicable interior noise standard for multi-family residential uses and hotel uses is 45 CNEL; standard construction techniques for wood-frame construction buildings required under the California Building Code typically achieve a minimum 25-dBA reduction from exterior sources at interior locations when the windows are in a closed position. Therefore, if residential or hotel building façade noise levels exceed 70 CNEL, interior noise levels for the project would potentially exceed the City's interior noise standard of 45 CNEL.

Source: Rincon Consultants, Inc. 2020 (Appendix K)

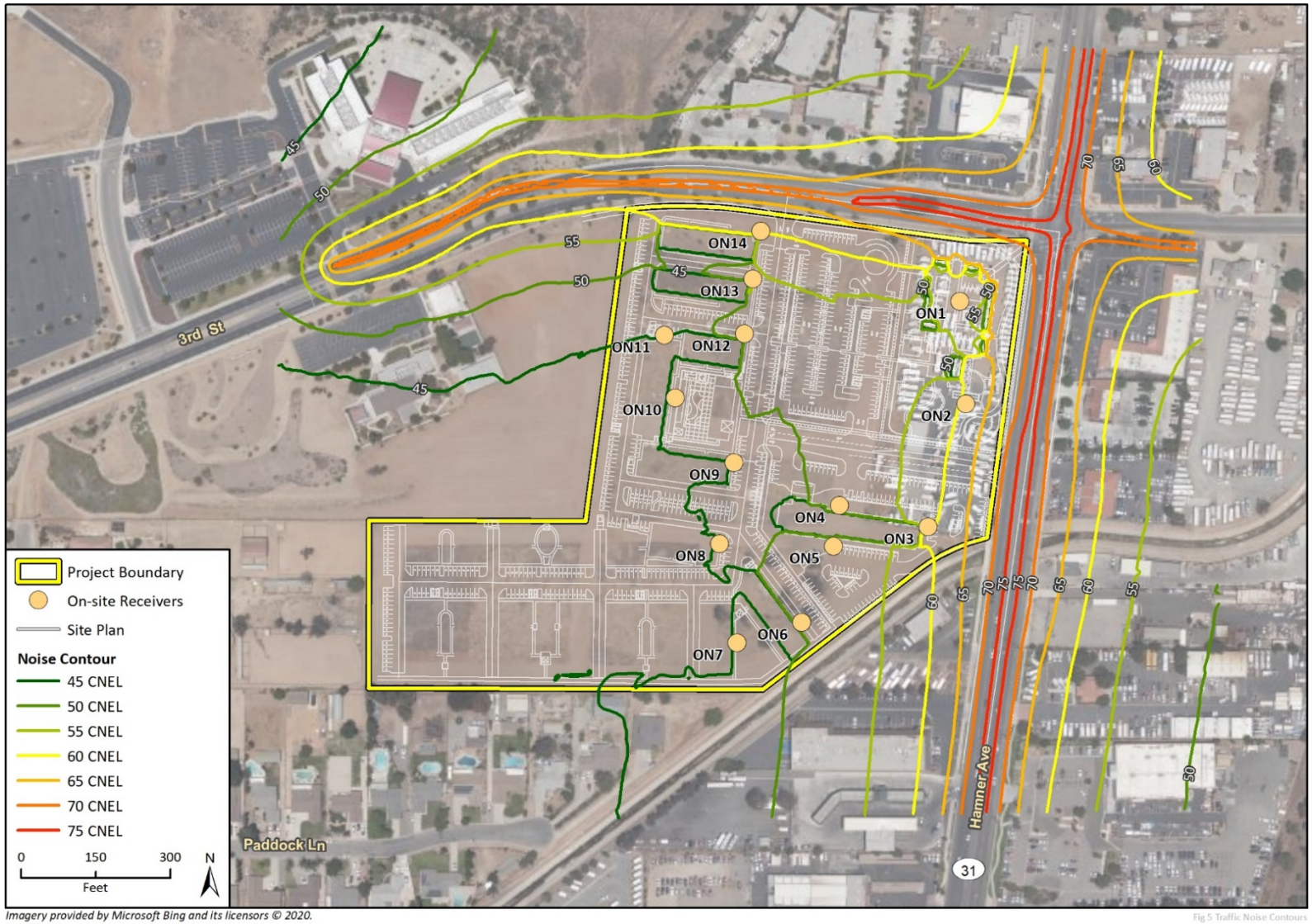
Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Figure 4.11-2 Roadway Noise Contours



Imagery provided by Microsoft Bing and its licensors © 2020.

Fig 5 Traffic Noise Contours

Threshold 2:	Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

IMPACT N-2 PROJECT CONSTRUCTION WOULD INTERMITTENTLY GENERATE GROUNDBORNE VIBRATION ON A SITE, WHICH MAY AFFECT SENSITIVE RECEPTORS NEAR THE PROJECT SITE, BUT WOULD NOT CREATE EXCESSIVE LEVELS OF VIBRATION THAT COULD CAUSE STRUCTURAL DAMAGE, DISTURB SLEEP AT NEARBY SENSITIVE RESIDENTIAL RECEPTORS, OR INTERFERE WITH OPERATION OF THE SENSITIVE RECEPTORS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted by the project. The greatest anticipated source of vibration during general project construction activities would be from a dozer, which may be used within 20 feet of the nearest off-site residential structures to the south and west when accounting for setbacks. A dozer would create approximately 0.089 in/sec PPV at a distance of 25 feet (Caltrans 2020). This would equal a vibration level of 0.11 in/sec PPV at a distance of 20 feet.[1] This would be lower than what is considered a distinctly perceptible impact for humans of 0.24 in/sec PPV, and the structural damage impact to residential structures of 0.2 in/sec PPV. Therefore, although a dozer may be perceptible to nearby human receptors, temporary impacts associated with the dozer (and other potential equipment) would be less than significant.

Operation of the project would not include any substantial vibration sources. Therefore, operational vibration impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3:	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

IMPACT N-3 THE PROJECT IS NOT LOCATED WITHIN THE VICINITY OF A PRIVATE AIRSTRIP OR AN AIRPORT INFLUENCE AREA. THEREFORE, THE PROJECT WOULD NOT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE AND THE PROJECT WOULD HAVE NO IMPACT.

The Riverside Municipal Airport, Chino Airport, and the Corona Municipal Airport are located approximately 6.5, 5.3, and 2.3 miles from the project site, respectively. Therefore, the project site is not located within two miles of a public airport or private airstrip or located in an airport land use plan, and no substantial noise exposure would occur to construction workers or users of the project site from aircraft noise. The project would have no impact.

Mitigation Measures

No mitigation measures would be required.

[1] PPVEquipment = PPVRef $(25/D)^n$ (in/sec), PPVRef = reference PPV at 25 feet, D = distance ,and n = 1.1

Significance After Mitigation

The project would result in no impacts without mitigation.

4.11.4 Cumulative Impacts

Cumulative noise assessment considers development of the project in combination with ambient growth and development projects within the vicinity of the project site. As discussed in Section 3, *Environmental Setting*, cumulative development in near the project site would include residential, commercial, office, and industrial developments. Each proposed development would generate temporary noise and vibration impacts during construction, the nature of which would be similar to the project (i.e., construction noise generated during site preparation and grading, building construction, etc.). Construction schedules for some of the cumulative projects considered may align with the project. However, construction noise and vibration are localized impacts that rapidly attenuate as distance from the source increases, especially within an urban environment. Therefore, the project would not contribute considerably to temporary cumulative construction noise and vibration impacts.

Cumulative development would also result in stationary (non-traffic) operational noise increases in the project vicinity, particularly in the area of the project site as several sites are currently vacant or have uses that do not generate substantial amounts of noise. Operational project noise impacts would not exceed local noise standards, as discussed in Impact N-1 above. The project does not entail any uses that would generate significant vibration impacts. Because noise and vibration attenuate with distance from its sources, noise and vibration impacts associated with operations and stationary sources would be limited to the project site and immediate vicinity. Each cumulative project would be required to complete project- and site-specific noise and vibration assessments for operational impacts and mitigate each project accordingly since operational noise and vibration impacts would be greatest on each project site. Therefore, project operations in combination with cumulative development would not contribute considerably to long-term, cumulative noise and vibration impacts.

Cumulative development in the project area would increase noise levels along local roadways as a result of additional vehicle trips. The traffic noise levels presented in Table 4.11-12 reflect the increase in ambient off-site traffic noise based on project generated trips. The overall noise levels from local roadway traffic would increase slightly as a result of the project, with the greatest noise increase being 1 dBA L_{eq} as shown in Table 4.11-12, which is not noticeable. Therefore, the project as designed does not require mitigation measures to ensure exterior and interior noise levels are at or below the City's noise thresholds. Noise attenuation and mitigation measures for cumulative projects would be proposed and implemented on a project-by-project basis to ensure operational and long-term ambient noise impacts are at or below the City's noise thresholds. Therefore, the project would have a less than significant cumulative noise impact.

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4.12 Public Services

This section analyzes the project's potential impacts to the provision of public services. The analysis contains a description of existing public services that include fire protection services, police protection services, schools, and parks and recreational facilities; a discussion of whether there are physical environmental effects of new or expanded facilities that are necessary to maintain acceptable service levels in relation to law enforcement and fire protection services.

Furthermore, this section analyzes whether any physical changes resulting from an increase in service demands from project development could result in significant adverse environmental effects. Thus, an increase in staffing associated with public services or an increase in calls for services would not, by itself, be considered a physical change in the environment, although physical changes in the environment resulting from the construction of new facilities or an expansion of existing facilities to accommodate the increased staff or equipment needs could constitute a significant impact.

4.12.1 Setting

a. Fire Protection

In cooperation with the California Department of Forestry and Fire Protection (CAL FIRE), the Riverside County Fire Department (RCFD) provides fire and emergency services to residents of unincorporated areas of Riverside County and to 20 partner cities, including the City of Norco. RCFD also responds to eight additional cities through mutual and automatic aid agreements. RCFD provides full service municipal and wildland fire protection, pre-hospital emergency medical response by paramedics and emergency medical technicians, technical rescue services, and response to hazardous materials discharges.

RCFD consists of four operational support divisions, including: Conservation Camps, Emergency Command Center, Hemet Ryan Air Attack Base, and Pre-Fire Management. In 2018, RCFD responded to 165,989 calls for service, including 2,494 from Norco. An estimated 822 calls for service from Norco were answered by Corona Battalion 4, which is accommodated by six fire stations including Station 14. Corona Battalion 4 responded to a total of 5,722 calls in its service area in 2018 (RCFD 2018).

Fire Stations

There are three fire stations operated by RCFD located in the City. The closest fire station to the project site is Station 14 on 1151 Hamner Avenue, approximately 0.9 mile south of the project site via local roadways. However, Station 14 is currently staffed seasonally and would not be the considered as first-in for an emergency response to the project site. Station 57, located at 3367 Corydon Avenue, approximately 2.4 miles northwest from the project site, would likely be the station responding to an emergency. Station 57 staffed 24-hours per day, seven days per week with a three-person engine (Reinertson 2020).

b. Police Protection

Norco contracts with the Riverside County Sheriff's Department (RCSD) for police protection services. The RCSD is the second largest Sheriff's Office in California. The adopted County of Riverside Fiscal Year 2019-2020 budget funds 3,906 RCSD positions, of which 3,528 are currently

filled and 378 were vacant at budget submission. RCSD has ten police stations and manages five correctional facilities, conducts Coroner-Public Administrator duties, and provides court services (Riverside County 2018).

The Norco Sheriff's Office, located within City Hall, is a substation of the Jurupa Valley Station located at 7477 Mission Boulevard in Jurupa Valley. The Jurupa Valley Station is commanded by a Captain and consists of a patrol function and an investigative function providing contract police services for the cities of Norco, Eastvale, and Jurupa Valley, as well as the unincorporated areas of eight cities (RCSD 2020). The Norco Sheriff's Office is 0.6 mile north of the project site and the Jurupa Valley Station is approximately 14.2 miles from the project site via local roadways.

The City of Norco has a contract with RCSD for law enforcement services, which specifies the provision of personnel sufficient to fulfill 60 patrol hours of service per day. The City has one dedicated Lieutenant, two dedicated traffic deputies, two dedicated deputies assigned to the Special Enforcement Team, and three dedicated community service officers (Elia 2020). The contract is funded via the General Fund and a supplemental law enforcement fund (Norco 2019a).

c. Schools

The project site is served by the Corona-Norco Unified School District (CNUSD), which is the largest school district in Riverside County and the ninth largest school district in California. CNUSD had 53,002 students enrolled for the 2018-2019 academic year (California Department of Education 2019). The enrollment for CNUSD schools located in and serving Norco is shown in Table 4.12-1. The John F. Kennedy Middle College High School is located nearest to the project site.

Table 4.12-1 2018-2019 Enrollment for Corona-Norco Unified Schools Located in the City of Norco

School	Address	Approximate Distance from Project Site	Enrollment
George Washington Elementary School	1220 W. Parkridge Street	1.0 mile, southwest	989
Highland Elementary School	2301 Alhambra Street	1.6 miles, north	567
John F. Kennedy Middle College High School	1951 Third Street	550 feet, west	620
Norco Elementary School	1700 Temescal Ave	1.0 mile, southeast	532
Norco High School	2065 Temescal Avenue	0.8 mile, east	2,062
Norco Intermediate School	2711 Temescal Avenue	1.0 mile, northeast	818
Riverview Elementary School	4600 Pedley Avenue	2.75 miles, northeast	275
Sierra Vista Elementary School	3560 Corona Avenue	1.5 miles, northeast	404
Victress Bower Elementary School	1250 W. Parkridge Street	1.0 mile, southwest	47
Total			**6,314**

Source: California Department of Education 2019

d. Parks and Recreation Facilities

The City of Norco is home to 15 outdoor public parks, and 1,791 acres of existing land use in Norco is designated public use and open space (not including streets and freeways) (Norco 2009). Norco currently maintains a parkland-to-resident ratio of approximately 68 acres per 1,000 residents, which is higher than the average ratio for low-density cities of 24 acres per 1,000 residents (The Trust for Public Land 2017).

Norco Parks

- **Clark Field – 1740 Detroit Street:** A lighted ball diamond suitable for youth and adult softball, soccer, and flag football.
- **Community Center Park – 3900 Acacia Avenue:** 15-acre public park with recreational facilities.
- **Ingalls Park – 3737 Crestview Avenue:** A large equestrian complex which includes the City's major rodeo facility. Ingalls Park hosts two major rodeo events, the Norco Valley Fair, Norco Horseweek, horse shows, classes and open riding.
- **Hawks Crest Park – Gulf Stream Lane and Aintree Downs Drive:** Neighborhood park connected to the City Trail System.
- **Kips Korner – Kips Korner Drive and Del Mar Street:** Neighborhood park with tennis court, tot lot, riparian and grass play areas.
- **Neal Snipes Park – Fifth Street and Hamner Avenue:** Neighborhood park with tot lots, a handicap-accessible restroom, acres of open grass areas, a picnic shelter for large groups and a fitness track with workout stations.
- **Norco Hills Park - 913 Harness Lane:** Neighborhood park with a covered picnic shelter, picnic table, tot lot, holding corrals, and a warm-up arena.
- **Pacer Park – Pacer Drive and Morgan Street:** Neighborhood park with small arena, tot lot, and grass areas.
- **Parmenter Park – 2760 Reservoir Drive:** Neighborhood park with a lighted ball field suitable for youth and adult softball, a nice tot lot, open grass area, and picnic tables.
- **Pikes Peak Park – Sixth Street:** Neighborhood park with a tot lot, open grass area, restrooms, gazebo with picnic tables, horseshoe pits, and basketball court.
- **Ridge Ranch Park – 460 Calvaletti Lane:** Neighborhood park connected to the City Trail System.
- **Sundance Park – 4047 Sundance Lane:** Neighborhood Park with tot lot, large picnic shelter, restroom facility and basketball court.
- **Ted Brooks Park – Bluff Street and Vine Street:** Neighborhood Park with small arena and grass area.
- **Makin/Shearer Sports Complex – Fifth Street and Corydon Avenue:** Regional youth sports center with three dedicated fields for youth softball, three for youth baseball, four soccer fields, and football overlay fields. The facility also has 2 snack bars.

Norco Recreation Facilities

- **George Ingalls Equestrian Event Center– 3737 Crestview Drive:** Banquet and convention facility with rooms for live music.

- **Community Center Complex – 3900 Acacia Avenue:** includes the 15,000 sf Riley Gymnasium, Community Center Ball field, the Norco Children's Center, the Norco Youth Center/ Scout House, and meeting halls and classrooms.
- **SilverLakes Equestrian and Sports Complex – 5555 Hamner Avenue:** A regional sports complex with 24 soccer fields, four LED synthetic fields, five equestrian arenas, 1,500 horse stalls, 10,000-person concert facility, restaurant, and private banquet facility.

Parmenter Park is located nearest to the project site, approximately one-mile northeast. Parmenter Park contains a lighted ball field suitable for softball, a tot lot, and an open grass area with picnic tables (City of Norco 2020). SilverLakes Equestrian and Sports Park is one of the largest recreational facilities located in the City and region, located approximately 2.5 miles north from the project site. SilverLakes Park contains 24 soccer fields, five equestrian arenas, outdoor café, outdoor concert venue, and a sit-down restaurant (Balboa Management Group 2016).

Equestrian Trail

The equestrian and animal-keeping lifestyle is a key characteristic of the City of Norco. In upholding the City's logo as "Horsetown USA," the City has established an elaborate equestrian trail network of nearly 104 miles as of 2018. The City's Comprehensive Trail Master Plan (2018a) provides design and maintenance standards for the City's pedestrian and equestrian trails to promote development of the alternative recreational transportation modes.

A Class 1 equestrian trail is located along the southside of Third Avenue, along the Third Street frontage of the project site. The Third Avenue equestrian trail connects to a soft-shoulder trail along Mountain Avenue. The trail along Mountain Avenue is connected to backyard trails in the existing residential neighborhood between residences and along the southern boundary of the project site and along a portion of the North Norco Channel (City of Norco 2018b).

e. Other Public Facilities

The 10,400-square-foot Norco Public Library is part of the Riverside County Library system and is located on 3240 Hamner Avenue, approximately 0.9 mile north. The Riverside County Library System has 35 branches, two bookmobiles, and a museum (Riverside County Library System 2020). Norco has a population of 26,386 and has 0.39 square feet of library space per capita.

4.12.2 Regulatory Setting

a. State

2018 California Strategic Fire Plan (Fire Plan)

The Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE (CALFIRE 2018). The 2018 Fire Plan reflects a focus on fire prevention and suppression activities and natural resource management to maintain the State's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. Major components center on the following goals:

- Improve the availability and use of consistent, shared information on hazard and risk assessment.

- Promote the role of local planning processes, including general plans, new development, and existing developments, and recognize individual landowner/homeowner responsibilities.
- Foster a shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans.
- Increase awareness and actions to improve fire resistance of man-made assets at risk and fire resilience of wildland environments through natural resource management.
- Integrate implementation of fire and vegetative fuels management practices consistent with the priorities of landowners or managers.
- Determine and seek the needed level of resources for fire prevention, natural resource management, fire suppression, and related services.
- Implement needed assessments and actions for post-fire protection and recovery.

California Fire Code (Title 24, Part 9, California Code of Regulations)

The California Fire Code incorporates the Uniform Fire Code (UFC) with necessary California amendments. This Code prescribes regulations consistent with nationally recognized good practices for the safeguarding, to a reasonable degree, of life and property from the hazards of fire explosion. It also addresses dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; conditions hazardous to life or property in the use or occupancy of buildings or premises; and provisions to assist emergency response personnel.

California Building Code

The 2016 California Building Code (CBC) became effective January 1, 2017, including Part 9 of Title 24, the California Fire Code. Section 701A.3.2 of the CBC requires that new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted, comply with all sections of the Chapter.

California Health and Safety Code (Sections 13000 et seq.)

This Code establishes State fire regulations, including regulations for building standards (also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Government Code Section 65995 (California Government Code, Title 7, Chapter 4.9)

California Government Code Section 65995 authorizes school districts to collect impact fees from developers of new residential and commercial/industrial building space. Section 65995 was established under the School Facilities Act of 1986 and refined and amended by the Leroy F. Greene School Facilities Act of 1998 (SB 50) to provide further guidance and restrictions on fee limits and fee types. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. The payment of school impact fees by developers are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other State or local laws. The CNUSD determines fees annually in accordance

with California Government Code Section 65995. The most recent developer fees for CNUSD are shown in Table 4.12-2.

Table 4.12-2 CNUSD Fees by Construction Type

Construction Type	Fee per Square Foot
Level 1 – Residential Room Additions 500 Square feet or larger	$3.79
Level 1 – New Residential	$3.79
Residential Room Additions 500 Square feet or less	Exempt – must receive an Exemption Certificate from the school district
Commercial/Industrial	$0.61
Senior Housing	$0.61

Source: CNUSD 2019

b. Local

City of Norco General Plan

The City of Norco General Plan Safety and Open Space Elements contain goals and policies related to public services such as police and fire protection. The General Plan Safety Element aims to provide a safe and healthy environment for all Norco residents, which entails includes adequate levels of police and fire protection, safe housing, and safe places to work and play. Goals and policies of the General Plan Safety Element that relate to public services and the project are as follows:

- **Policy 2.3.1: Fire Safety.** The City shall maintain adequate fire protection in both urban and hillside areas through the enforcement of the latest fire codes, encouraging cooperation between the fire department, planning, and building divisions, and coordinating with neighboring fire departments.
- **Policy 2.3.1a:** Coordinate with other fire protection agencies to provide adequate levels of fire protection throughout the General Plan Area, through a combination of both aggressive prevention and suppression activities.
- **Policy 2.3.1b:** Pursue mutual response agreements between fire districts and departments. These agreements should provide equal and reciprocal benefits and enhance the ability of local entities to provide levels of adequate fire protection.
- **Policy 2.3.1d:** The minimum fireflow standards for multiple-family residential construction should be 1,500 gallons of water per minute.
- **Policy 2.3.1e:** The minimum fireflow standards for commercial and industrial developments should be 2,500 gallons of water per minute.
- **Policy 2.3.1f:** Endeavor to meet and maintain adequate fire response time for all residents and businesses.
- **Policy 2.3.1i:** Consider the needs of fire prevention and suppression during project review of development projects. These include, but are not limited to, providing adequate access to buildings, adequate separation between buildings, and adequate building setbacks from fuel modification areas. Fire suppression measures also include continued implementation of

adopted fire and buildings codes (Title 15) pertaining to the installation of automatic fire extinguishing systems in new buildings.

- **Policy 2.3.1j:** The City Fire Department should provide input to the Planning Division for all developments that require site plan or subdivision review prior to hearings before official commissions or the City Council. Street and driveway widths shall be adequate to provide access to sites and buildings shall be configured to provide adequate sufficient clearances for fire suppression and other emergency access needs.
- **Policy 2.3.1o:** Regularly test fire hydrants throughout the City to determine their pressures and capacities. Replace or repair faulty fire hydrants, color code hydrants by capacity and schedule improvements to portions of a system that do not meet fire flow standards established herein.
- **Policy 2.5.2: Police Service.** The City shall endeavor to provide a safe, low-crime environment through neighborhood watch programs, citizen patrols, and ensuring adequate police response times.
- **Policy 2.5.2a:** Endeavor to provide a minimum response time of 5 minutes on all priority 1 calls and 12 minutes on all priority 2 calls. Priority 1 calls include those of a life-threatening nature such as: robbery in progress, accident involving bodily injury, death-threatening situation, a person unable to breathe, and violent crimes in process. Priority 2 calls include those that are not life threatening such as: burglary past, petty theft, shoplifting.
- **Policy 2.5.3: Security Design Program.** The City will work to reduce crime potential in the urban environment by making sure that any input regarding crime-reduction strategies from the Planning Division and the Sherriff's Department are considered in all development plans.
- **Policy 2.5.3a:** Through zoning, subdivision and building regulations, and environmental assessment practices, the City should encourage development that will increase or better ensure the public's safety.
- **Policy 2.5.3b:** Encourage and implement appropriate utilization of defensible space design concepts in new developments.
- **Policy 2.5.3c:** Encourage community crime prevention measures, such as building security hardware that could result in a reduction in insurance premiums and other economic incentives.
- **Policy 2.5.3e:** Promote land use and design policies and regulations which encourage a mixture of compatible uses to promote and increase the safety of public use areas and pedestrian/equestrian travel.
- **Policy 2.5.3f:** Systematically mitigate crime hazards related to urban development or patterns of urban development as they are identified and as resources permit.

Furthermore, the General Plan Open Space Element includes the City’s greenspace standard that recommends eight acres per 1,000 population.

City of Norco Development Impact Fees

Norco requires the payment of development impact fees (DIFs) to offset the impacts of new developments on Norco public services and facilities, including:

- Equestrian Trails Development Fee
- General Government Facilities Fee
- Fire Protection Fee
- Parkland and Open Space Acquisition

These development impact fees were created in accordance with City of Norco Municipal Code Section 3.40.030. City funds and associated DIFs are shown in Table 4.12-3.

Table 4.12-3 Norco Development Impact Fees

Fund Name	Single-Family Fee per Unit	Multi-Family Fee per Unit
Parks	$11,821	$9,639
Fire	$1,010	$1,009
General[1]	$1,199	$106
Trails	$4,662	$2,559
Public Library Facilities	$3,318	$2,706

[1] Includes Sheriff's Department

Source: Norco 2019b

4.12.3 Impact Analysis

a. Significance Thresholds

Appendix G of the State Guidelines states that a project would have a significant impact if it would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response times or other performance objectives for any of the public services:
    i. Fire protection
    ii. Police protection
    iii. Schools
    iv. Parks
    v. Other public facilities

b. Methodology

Potential project impacts related to public services (fire and police protection, schools, parks, and other public facilities) were evaluated based on the ability of existing services and facilities to meet the anticipated needs of the project.

c. Project Impacts and Mitigation Measures

Threshold 1.i:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-1 RCFD HAS THE CAPACITY AND FACILITIES TO SERVE THE PROJECT, AND IMPLEMENTATION OF THE PROJECT WOULD NOT RESULT IN THE NEED FOR EXPANDED FIRE PROTECTION FACILITIES. ADDITIONALLY, DEVELOPMENT IMPACT FEES WOULD OFFSET PROJECT DEMAND FOR NEW FIRE PROTECTION FACILITIES. THEREFORE, THE PROJECT WOULD HAVE A LESS THAN SIGNIFICANT IMPACT.

RCFD has an average response time goal of seven minutes throughout urbanized areas such as Norco. In addition, RCFD standards hold that urban development should be located no more than three miles from a County fire station. The project would be located in the existing service area of RCFD and would not increase its coverage area. Station 57, which would serve the project site, is approximately 2.4 miles northwest from the project site. RCFD would be able to provide fire protection services for the project without the need to expand its facilities to provide services (Reinertson 2020).

The project would increase the service population of the RCFD by an estimated 915 residents, as discussed in Section 5.3, *Population and Housing*, and based on analysis completed in the project-specific Air Quality and GHG Report (Appendix C). The project's contribution to demand for fire protection services would be offset by payment of proportionate DIFs of $1,009 per unit of multi-family housing allocated to fire protection services, as indicated in Table 4.12-3. These fees would cover potential station construction or expansion to accommodate cumulative increases in RCFD service population.

Policy 2.3.1 of the General Plan Safety Element directs the City to maintain adequate fire protection in both urban and hillside areas through the enforcement of the latest fire codes, encouraging cooperation between the fire department, planning, and building divisions, and coordinating with neighboring fire departments. Policy 2.3.1a directs the City to coordinate with other fire protection agencies to provide adequate levels of fire protection. Potential environmental impacts related to the construction of new or expanded fire protection facilities would be assessed on a project-specific level under CEQA.

The project would not impede the ability of RCFD to provide fire protection services in its service area because it would not hinder roadway access or access to emergency services. Appropriate fire protection measures would be incorporated into the design of proposed project buildings in accordance with the CBC and California Fire Code (2019 editions) and the National Fire Protection Association (NFPA) standards (2016 editions of NFPA 13, *Standard for the Installation of Sprinkler Systems*; NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*; NFPA 72, *National Fire Alarm and Signaling Code*; and the 2017 edition of NFPA 17A, *Standard for Wet Chemical Extinguishing Systems*). Additionally, under Policy 2.3.1j of the General Plan Safety Element, Norco will work with RCFD through the review of proposed development projects to ensure that fire safety issues are considered, including adequate street and driveway widths to provide access to sites and buildings to provide adequate sufficient clearances for fire suppression and other emergency access needs.

The RCFD provided comments based on preliminary review of the proposed project, which specified that the project must provide a water system capable of delivering the required fire flow in accordance with the California Fire Code; placement of on-site fire protection measures such as fire hydrants; and 24-foot width of on-site access roads to fit fire apparatus. Final project review will be completed by the RCFD when complete building plans are submitted, to ensure the project incorporates all fire safety design and protection features.

Therefore, project impacts to fire protection facilities and services would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 1.ii:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-2 THE PROJECT WOULD INCREASE THE SERVICE POPULATION OF POLICE PROTECTION SERVICES. HOWEVER, PROJECT CONTRIBUTIONS TO DEVELOPMENT IMPACT FEES WOULD OFFSET THE INCREMENTAL DEMAND FOR NEW POLICE PROTECTION FACILITIES. THEREFORE, THE PROJECT WOULD HAVE A LESS THAN SIGNIFICANT IMPACT.

The project would be located in the existing service area of RCSD and would not increase its service area. The Policy 2.5.2a of the General Plan Safety Element states that the City shall endeavor to provide a minimum response time of 5 minutes on all priority 1 calls (life-threatening situations and violent crime) and 12 minutes on all priority 2 calls (non-life-threatening situations). As stated above regarding fire protection services, the project would increase the service population of the RCSD by an estimated 915 residents, as discussed in Section 5.3, *Population and Housing*, and based on analysis completed in the project-specific Air Quality and GHG Report (Appendix C).

City staff would determine if certain conditions should be applied that would require a need for additional public safety during the project review process. RCSD continually evaluates staffing levels based on cumulative growth in its service area, the determinations for which are included as staffing needs recommendations for future RCSD organizational plans (Elia 2020).

General Plan Safety Element Policy 2.5.2 directs the City to provide a safe, low-crime environment through neighborhood watch programs, citizen patrols, and ensuring adequate police response times. The project's contribution to demand for police protection services would be offset by payment of proportionate DIFs of $106 per unit of multi-family housing allocated to the general fund, as indicated in Table 4.12-3. These fees would cover future construction and/or expansion of RCSD sheriff's stations to accommodate cumulative service demand and population increases in RCSD's service area. Potential environmental impacts related to the construction of new or expanded police protection facilities would be assessed on a project-specific level under CEQA. The project would not impede the ability of RCSD to provide police protection services because the project would not hinder roadway access or access to emergency services.

Furthermore, the RCSD provided comments based on preliminary review of the proposed project, which specified that the project must provide the following to ensure visibility and safety of project residents, employees, and patrons: adequate lighting in all proposed parking areas from dusk to dawn; security surveillance equipment placed at building entrances, parking areas, and other hidden areas; regular maintenance of all landscaped areas, plants, and trees; and clear signage for areas that are not open to public access. The proposed project would incorporate all recommended visibility and safety measures.

Given existing Norco policies to ensure adequate police protection and the project's contribution to DIFs, project impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 1.iii:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Impact PS-3 THE PROJECT WOULD INCREASE THE ENROLLMENT OF STUDENTS IN LOCAL SCHOOLS, BUT CNUSD SCHOOLS CONTAIN SUFFICIENT CAPACITY TO MEET THE POTENTIAL DEMAND. FURTHERMORE, THE PROJECT WOULD CONTRIBUTE DEVELOPMENT IMPACT FEES TO OFFSET IMPACTS TO SCHOOLS. THEREFORE, THE PROJECT WOULD HAVE A LESS THAN SIGNIFICANT IMPACT.

The CNUSD school facility capacity is determined in accordance with the Leroy F. Greene School Facilities Act of 1998 pursuant to the Assembly Bill Form 50-02, *Existing Building Capacity*, as revised on August 31, 2000. According to the Fee Justification Report prepared by CNUSD (2018), the student generation rates for multi-family residential units are for grades K-6 is 0.2712 students per dwelling unit; 0.0752 students per dwelling unit for grades 7 through 8; and 0.1615 students per dwelling unit for grades 9-12. The existing school district facility has a capacity surplus of 2,130 seats. Table 4.12-4 shows the project's anticipated contribution to the CNUSD enrollment and capacity.

Table 4.12-4 CNUSD Enrollment and Capacity

Facility Type	Current Enrollment	Total Capacity	Available Capacity	Project Contribution	Available Capacity After Project
Elementary (Grades K-6)	27,379	28,185	806	87	719
Middle School (Grades 7-8)	8,354	8,612	258	24	234
High School (Grades 9-12)	17,540	18,606	1,066	52	1,014
Total K-12	**53,273**	**55,403**	**2,130**	**163**	**1,967**

Source: CNUSD 2018

The 320 units of multi-family residences would generate approximately 87 elementary, 24 middle, and 52 high school students, or a total of 163 students eligible for grades K-12 (CNUSD 2018). As shown above in Table 4.12-4, CNUSD facilities would have sufficient capacity to accommodate the anticipated increase of 163 students generated by the project, and would not need to construct or expand existing school facilities.

Additionally, pursuant to Government Code Section 65995(b)(2), CNUSD is authorized to collect $0.61 per square foot of for new commercial/industrial development, which would apply to the project. State law assumes that the developer's payment of school impact fees to the local school district, in an amount established by the school district, would address school capacity impacts. Potential environmental impacts related to the construction of new or expanded school facilities would be assessed on a project-specific level. Therefore, project impacts to school capacity would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 1.iv:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Impact PS-4 THE PROJECT WOULD INCREASE THE USE OF PARKS AND RECREATION FACILITIES. HOWEVER, THE CITY MAINTAINS A HIGH PARKLAND TO POPULATION RATIO, AND THE PROJECT WOULD CONTRIBUTE DEVELOPMENT IMPACT FEES TO OFFSET IMPACTS TO PARKS AND RECREATION FACILITIES. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 5.3, *Population and Housing*, the project would generate approximately 915residents. According to Norco Municipal Code Section 3.40.038, the project applicant would be required to pay a parkland and open space acquisition fee which provides funds for the acquisition, improvement, and development of park and open space land and recreational facilities. The City is not in need of additional parkland, as it maintains a high parkland to population ratio, and would not need to acquire additional parkland in order to meet its goal of eight acres per 1,000 residents.

The project site is not currently identified as parkland or an anticipated addition to the open space network. The project would provide recreational facilities with the proposed food garden that would be available for use by City residents and visitors. Proposed recreational facilities include an outdoor park space, live performance stage, a horse paddock, and equestrian trail, as described in Section 2, *Project Description*. Though available for public use, these recreational facilities would be privately owned and operated and would not require additional maintenance efforts from the City. The project would also provide common outdoor recreation spaces reserved for residential use.

The project's contribution to demand for park and recreation facilities would be offset by payment of proportionate DIFs of $9,639 per unit for parks and $2,559 per unit for trails, as indicated in Table 4.12-3. These fees would cover future parkland and recreation facility construction or expansion to accommodate cumulative increases in Norco's population. Potential environmental impacts related to the construction of new or expanded recreational and park facilities would be assessed on a project-specific level under CEQA.

Therefore, the project would not increase the demand on existing park and recreation facilities or require the expansion or construction of recreational facilities. The project would have a less than significant impact.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 1.v:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Impact PS-5 THE PROJECT WOULD INCREASE THE USE OF LIBRARY FACILITIES, AND THE PROJECT WOULD CONTRIBUTE DEVELOPMENT IMPACT FEES TO OFFSET IMPACTS TO LIBRARY FACILITIES. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 5.3, *Population and Housing*, the project would generate approximately 915 residents. According to Norco Municipal Code Section 3.40.038, the project's contribution to population increase would be offset by payment of proportionate DIFs, which includes a public library facilities fee of $2,706 per unit. These funds would pay for future acquisition or expansion of library facilities. Potential environmental impacts related to the construction of new or expanded library facilities would be assessed on a project-specific level under CEQA.

Therefore, project impacts to public library facilities would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation measures.

4.12.4 Cumulative Impacts

Planned and pending projects in Norco and surrounding areas are listed in Table 3-1 in Section 3, *Environmental Setting*, and include residential, commercial, and industrial land uses.

As discussed in Section 5.3, *Population and Housing*, the project would generate approximately 915 residents. The addition of new residents would generate a proportional increase in demand for additional fire protection and emergency medical services, police protection, school services, use of parks and recreation facilities, and use of libraries and other public services. As discussed above, implementation of the project would not create a cumulatively considerable need for new or expanded public services and facilities due to sufficient capacities for services and facilities.

New development in Norco, including the projects listed in Table 3-1 in Section 3, *Environmental Setting*, may also contribute to an increase in service population and use of public services, and cumulatively, there may be a need for new or improved facilities to maintain acceptable service ratios, response times, or other applicable goals.

Each project's incremental contribution to demand for new services would be offset by payment of proportionate property taxes, CNUSD development fees, and/or DIF in accordance with Norco Municipal Code Section 3.40.038. Additionally, new development projects would be reviewed by the RCFD and RCSD staff prior to development permit approval to ensure adequate fire safety and security measures are provided for each site-specific development.

Potential environmental impacts related to the construction of new or expanded public facilities would be assessed on a project-specific level when such development of public services and facilities are considered. Therefore, cumulative impacts to public services and facilities would be less than significant.

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4.13 Transportation

This section analyzes the project's potential impacts to transportation and traffic. The analysis contains a description of the circulation system in the project area, a discussion of potential transportation and traffic impacts resulting from the project based on proposed uses, and any mitigation measures required to reduce impacts.

The analysis is based on the Traffic Impact Analysis (TIA) prepared for the project by Urban Crossroads which is included as Appendix L, and the Vehicle Miles Traveled (VMT) Assessment prepared for the project by Urban Crossroads which is included as Appendix M. The TIA is based on information compiled through a review of existing regional and local transportation plans and databases, traffic volume observations at study intersections take collected in January 2020, and scenario modeling. The VMT Assessment is based on a screening level assessment pursuant to State Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* and reviewed in the Western Riverside County Council of Governments (WRCOG) Screening Tool.

4.13.1 Setting

a. Study Area

Consistent with the City of Norco's traffic study requirements, the project roadway study area includes eight existing and future intersections where the project is anticipated to contribute 50 or more peak hour trips. The 50-peak hour trip threshold is used by numerous agencies throughout Riverside County, including Norco. A project trip contribution of less than 50 peak hour trips is generally considered less than significant and is not evaluated. Study intersections are shown on Figure 4.13-1, and consist of the following eight intersections:

a. Project Driveway 1 and Third Street
b. Hamner Avenue and Sixth Street
c. Hamner Avenue and Fourth Street
d. Hamner Avenue and Third Street
e. Hamner Avenue and Project Driveway 2
f. Hamner Avenue and Second Street
g. Interstate 15 (I-15) Southbound Ramps and Second Street
h. I-15 Northbound Ramps and Second Street

Existing Roadway Network

Highway System

Regional access to the project site is provided via I-15 with the nearest on- and off-ramps located 0.4 mile southeast (east of the Second Street and Hamner Avenue intersection), and State Route 91 (SR-91) located approximately 2.5 miles to the south of the project site. The TIA evaluated freeway facilities adjacent to the point of entry to the State Highway System at I-15 and Second Street.

Figure 4.13-1 Roadway Network and Study Area Intersections

Source: Urban Crossroads 2020 (Appendix L)

Urban Arterials

Urban Arterials are six-lane divided roadways (divided by either a 14-foot raised median or 10-foot striped median) with a 110-foot right-of-way and 86-foot curb-to-curb measurement. Hamner Avenue is the only study area roadway within the City of Norco that is classified as an Urban Arterial (Appendix L).

Major Arterials

Major Arterials are four-lane divided roadways (divided by a 12-foot raised median) with a 100-foot right-of-way and 80-foot curb-to-curb measurement. Sixth Street, east of Hamner Avenue, is the only study area roadway within the City of Norco that is classified as a Major Arterial (Appendix L).

Collector Streets

Collector Streets are four-lane undivided roadways with an 88-foot right-of-way and 64-foot curb-to-curb measurement, which includes a 12-foot equestrian trail. The following study area roadways within the City of Norco are classified as Collector Streets (Appendix L):

- Second Street, east of Mountain Avenue
- Third Street, west of Hamner Avenue
- Sixth Street, west of Hamner Avenue

Local Streets

Local Streets are two-lane undivided roadways with a 60-foot right-of-way and 36-foot curb-to-curb measurement. The following study area roadways within the City of Norco are classified as Local Streets (Appendix L):

- Fourth Street
- Third Street, east of Hamner Avenue

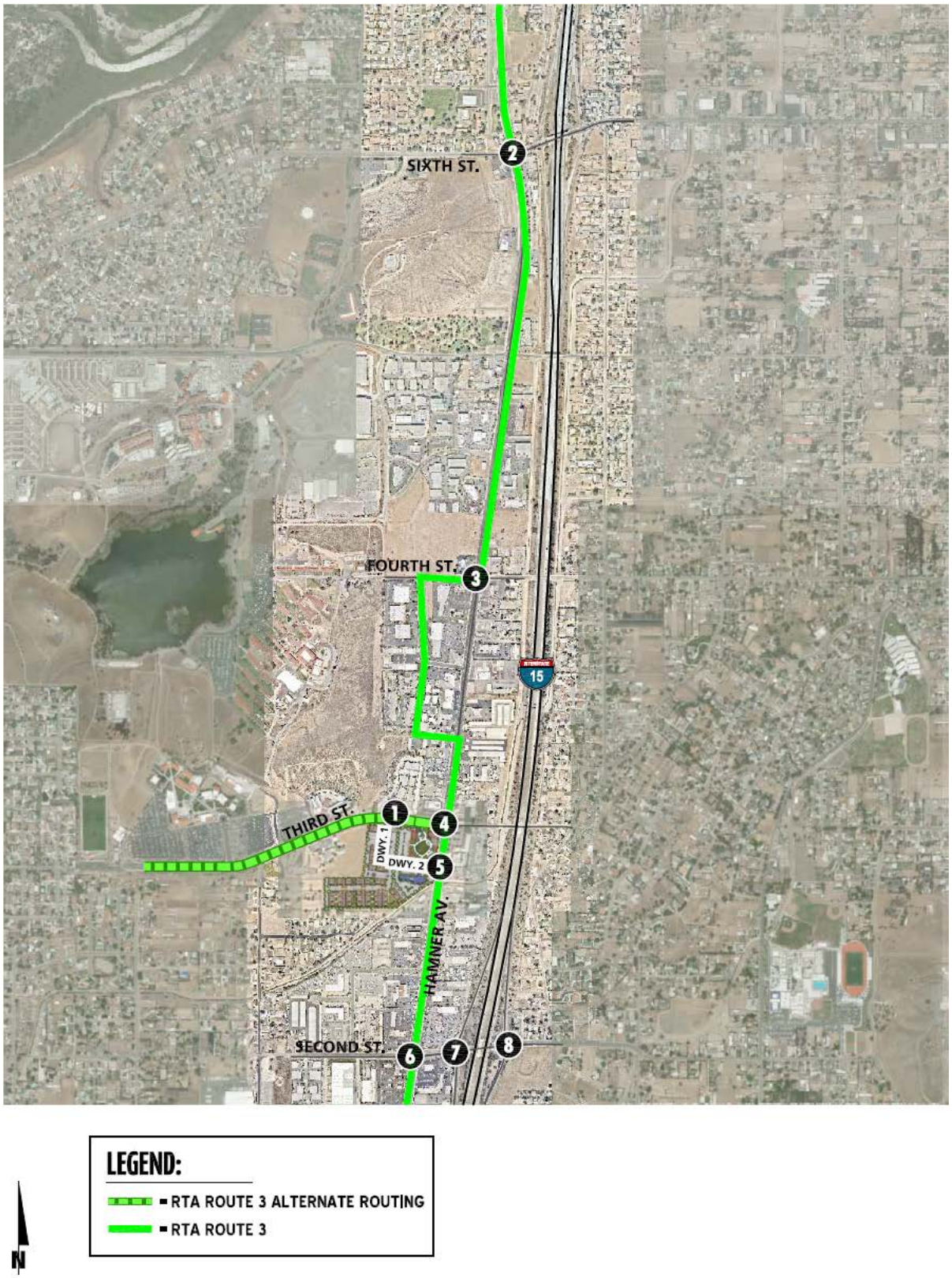
Existing Transit Service

The study area is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region near the City of Norco, with bus service along Hamner Avenue and Third Street, via RTA Route 3. The project site would likely be served by RTA Route 3 alternative routing, as indicated on Figure 4.13-2. Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate (Appendix L).

There are two bus stops located along Hamner Avenue that are within 1,000 feet of the project site:

- Hamner + Lampton stop, approximately 760 feet north
- Hamner NS Auto Mall Drive stop, approximately 320 feet south

Figure 4.13-2 Existing Transit Routes



Source: Urban Crossroads 2020 (Appendix L)

Existing Alternative Transportation Facilities

Class II bikeways, also referred to as "bike lanes," are intended to delineate the right-of-way assigned to bicyclists and motorists, and to provide for more predictable movements of each. Bike lane signs and pavement markings help define the bikeway. A more important reason for bike lanes is to better accommodate bicyclists through corridors where insufficient room exists for safe bicycling on existing streets. Figure 4.13-3 shows the existing pedestrian facilities in the project site vicinity.

Hamner Avenue is planned to have a Class II bike lane south of Hidden Valley Parkway. Additionally, there is an existing Class I equestrian trail on the south side of Third Street along the project frontage. Field observations conducted in January 2020 indicate nominal pedestrian and bicycle activity within the study area. shows the existing pedestrian facilities, including sidewalks and crosswalks.

b. Existing Traffic Volumes

Traffic volumes were collected during the peak hour conditions using traffic count data collected in January 2020, while schools were in session. The following peak hours were selected for analysis:

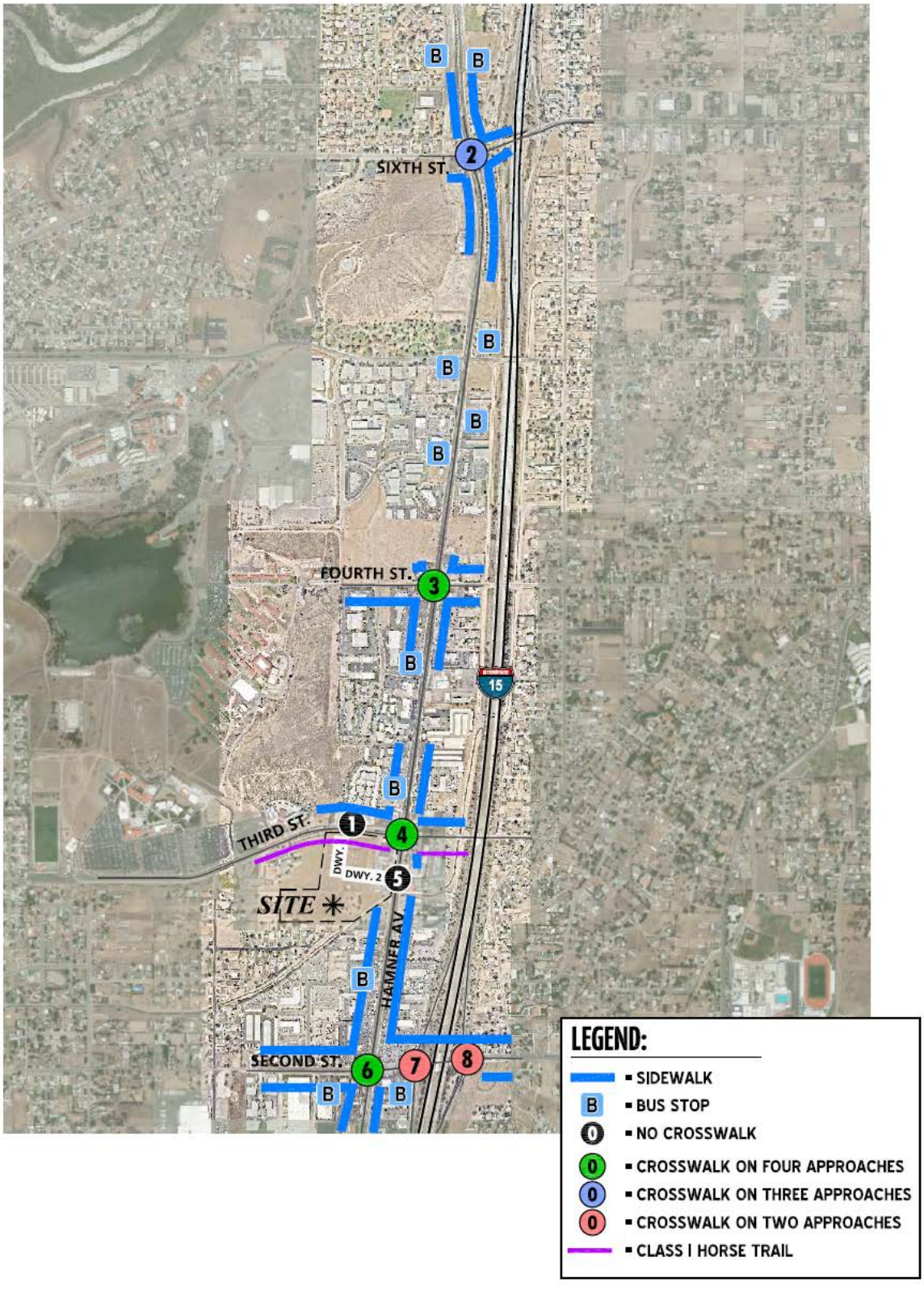
- Weekday AM Peak Hour (peak hour between 7:00 a.m. and 9:00 a.m.)
- Weekday PM Peak Hour (peak hour between 4:00 p.m. and 6:00 p.m.)

The weekday AM and weekday PM peak hour count data are representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes, and near-by schools were in session and operating on normal schedules, including Norco College and John F. Kennedy Middle College High School located west of the project site. Appendix 3.1 of the TIA provides the raw manual peak hour turning movement traffic count data sheets (Appendix L).

Intersection Level of Service

Traffic at the study intersections was quantified by determining level of service (LOS), a qualitative measure describing operational conditions within a traffic stream. LOS has letter designations ranging from A to F, representing progressively worsening traffic operations. According to the City of Norco General Plan Circulation Element, LOS D is defined as the minimum acceptable LOS standard for intersections under its jurisdiction. LOS D is also the standard applied for California Department of Transportation (Caltrans) facilities (freeway ramps) and intersections. The LOS at each study intersection was determined based on the 2016 Highway Capacity Manual (HCM) methodology (Appendix L). Table 4.13-1 provides the LOS definitions and thresholds for signalized intersections based on HCM methodology.

Figure 4.13-3 Existing Pedestrian Facilities



Source: Urban Crossroads 2020 (Appendix L)

Table 4.13-1 Signalized Intersection LOS Thresholds

Level of Service	Description	Average Control Delay (seconds)
A	Excellent. Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Very Good. Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Good. Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Fair. Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Poor. Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Failure. Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up

V/C = volume to capacity ratio

Source: Urban Crossroads 2020 (Appendix L)

The City requires the operations of unsignalized intersections to be evaluated using HCM methodology. At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (Appendix L).

Total delay is defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. This time includes the time required for the vehicles to travel from the last-in-queue position to the first-in-queue position. Table 4.13-2 provides the LOS definitions for signalized intersections based on HCM methodology.

Table 4.13-2 Unsignalized Intersection LOS Thresholds

Level of Service (V/C ≤ 1.0)	Description	Average Control Delay Per Vehicle (seconds)
A	Little or no delays	0 to 10.00
B	Short traffic delays	10.01 to 15.00
C	Average traffic delays	15.01 to 25.00
D	Long traffic delays	25.01 to 35.00
E	Very long traffic delays	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded	50.01 and up

V/C = volume to capacity ratio

Source: Urban Crossroads 2020 (Appendix L)

The existing LOS for the study area intersections is presented in Table 4.13-3. As shown in bold type, the following existing study area intersections are currently operating at an unacceptable LOS during the peak hours:

- Hamner Avenue and Sixth Street (#2): LOS E AM peak hour only
- Hamner Avenue and Second Street (#6): LOS E AM peak hour, LOS F PM peak hour

Table 4.13-3 Intersection LOS for Existing (2020) Conditions

			Delay (seconds)[1]		LOS	
No.	Intersection	Traffic Control[2]	AM	PM	AM	PM
1	Project Driveway 1 and Third Street	CSS	15.5	11.0	C	B
2	Hamner Avenue and Sixth Street	TS	**63.2**	36.4	**E**	D
3	Hamner Avenue and Fourth Street	TS	20.1	21.7	C	C
4	Hamner Avenue and Third Street	TS	28.1	21.8	C	C
5	Hamner Avenue and Project Driveway 2	CSS	15.0	19.1	C	C
6	Hamner Avenue and Second Street	TS	**63.1**	**196.8**	**E**	**F**
7	I-15 Southbound Ramps and Second Street	TS	16.9	13.4	B	B
8	I-15 Northbound Ramps and Second Street	TS	32.4	37.0	C	D

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control.

[2] CSS = Cross-street Stop; TS = Traffic Signal

BOLD = unacceptable LOS

Source: Urban Crossroads 2020 (Appendix L)

Traffic Signal Warrant

The term "signal warrants" refers to the list of established criteria used by the Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. The TIA uses the signal warrant criteria presented in the latest edition of the Caltrans *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

The signal warrant criteria for Existing (2020) conditions are based on several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. The TIA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing study area intersections for all analysis scenarios.

Warrant 3 is appropriate to use for the study area because it provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). The speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection in the TIA.

There are no unsignalized study area intersections that warrant a traffic signal for Existing (2020) conditions. However, traffic signal warrant analyses were completed for the following proposed driveways which would result in unsignalized study area intersections:

- Driveway 1 and Third Street
- Hamner Avenue and Driveway 2

Existing Freeway Off-Ramp Queuing

Consistent with Caltrans requirements, the TIA includes assessment of the 95th percentile queuing of vehicles at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-15 and Second Street interchange. Specifically, the queuing analysis is utilized to identify any potential queuing and “spill back” onto the I-15 mainline from the off-ramps.

A queuing analysis was performed for the off-ramps at the I-15 and Second Street interchange to assess vehicle queues for the off-ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially “spill back” onto the I-15 mainline. The analysis determined there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows. This finding is consistent with field observations at the time traffic counts were conducted in January 2020 (Appendix L).

Furthermore, the northbound off-ramp at Second Street has recently been improved to include the addition of a northbound left turn lane. With this improvement in place, there were no observed off-ramp queuing issues during the AM and PM peak hours. Appendix 3.4 of the TIA contains worksheets for Existing (2020) conditions off-ramp queuing analysis (Appendix L).

Existing Freeway Facilities

The TIA includes evaluation of freeway segments where the project is anticipated to contribute traffic. The freeway system in the study area has been broken into segments defined by the freeway-to-arterial interchange locations. The freeway segments are evaluated based on peak hour directional volumes. The freeway segment analysis is based on the methodology described in the HCM. The performance measure preferred by Caltrans to calculate LOS is density, which is expressed in terms of passenger cars per mile per lane. Table 4.13-4 illustrates the freeway segment LOS descriptions for each density range utilized in the TIA (Appendix L).

Table 4.13-4 Freeway Mainline LOS Thresholds

Level of Service	Description	Density Range (pc/mi/ln)
A	Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed.	0 to 11.0
B	Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed.	11.1 to 18.0
C	Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages.	18.1 to 26.0
D	Speeds begin to decline slightly and flows, and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions.	26.1 to 35.0
E	Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing.	35.1 to 45.0
F	Breakdown in vehicle flow.	45.1 and up

pc/mi/ln = passenger cars per mile per lane

Source: Urban Crossroads 2020 (Appendix L)

Study area freeway mainline analysis locations were selected based on Caltrans traffic study guidelines, which may require the analysis of State highway facilities (Appendix L). Consistent with recent Caltrans guidance, and because deficiencies to freeway segments tend to dissipate with distance from the point of State Highway System entry, quantitative study of freeway segments beyond those immediately adjacent to the point of entry typically is not required. The freeway system in the study area was broken into segments defined by freeway-to-arterial interchange locations where the project is anticipated to contribute trips. Freeway facilities evaluated in the TIA are listed as follows:

a. I-15 southbound, north of Second Street
b. I-15 southbound, off-ramp at Second Street
c. I-15 southbound, on-ramp at Second Street
d. I-15 southbound, south of Second Street
e. I-15 northbound, north of Second Street
f. I-15 northbound, on-ramp at Second Street
g. I-15 northbound, off-ramp at Second Street
h. I-15 northbound, south of Second Street

Although analyzed for the TIA, the project would contribute less than 50 peak hour trips to the study area merge/diverge ramp junctions. Although HCM methodology indicates the influence area for a merge/diverge junction is 1,500 feet, the analysis was performed at all ramp locations with respect to the nearest on- or off-ramp at each study area interchange in an effort to be consistent

with the preferred approach recommended by Caltrans (Appendix L). Table 4.13-5 presents the merge/diverge area level of service descriptions for each density range utilized for this analysis.

Table 4.13-5 Freeway Merge and Diverge LOS

Level of Service	Density Range (pc/mi/ln)[1]
A	≤10.0
B	10.0 to 20.0
C	20.0 to 28.0
D	28.0 to 35.0
E	>35.0
F	Demand Exceeds Capacity

pc/mi/ln = passenger cars per mile per lane
Source: Urban Crossroads 2020 (Appendix M)

Similar to the basic freeway segment analysis, I-15 volume data was obtained from Caltrans database for the segments of I-15 north of Second Street. The ramp data (per the count data presented in Appendix 3.1 of the TIA (Appendix L) was then utilized to flow conserve the mainline volumes to determine the remaining I-15 mainline segment volumes. Flow conservation checks ensure that traffic flows from north to south (and vice versa) of the interchange area with no unexplained loss of vehicles. The data was obtained from January 2020.

To conduct a conservative analysis, the maximum value observed within the three-day period was utilized for the weekday morning (AM) and weekday evening (PM) peak hours. In addition, truck traffic, represented as a percentage of total traffic and actual vehicles (as opposed to passenger car equivalent volumes) were utilized for the purposes of the freeway ramp junction (merge/diverge) analysis.

As shown in Table 4.13-6, the I-15 northbound on-ramp at Second Street was observed to operate at an unacceptable LOS during peak hours for Existing (2020) conditions. It should be noted that although I-15 is found to operate at an acceptable LOS based on the Highway Capacity Software (HCS7) analysis, field observations indicate constrained (congested) flow conditions in the northbound direction during the AM and PM peak hours. According to the Caltrans, I-15 northbound experiences speeds as low as 25 miles per hour during the morning and evening peak hours. The freeway is slow moving; therefore, fewer vehicles are being captured and reflected in Caltrans data. The LOS for the I-15 mainline analyses is based on Caltrans data and HCS7. Due to limitations of the software, such as limiting the speed limit input to a minimum of 45 miles per hour, HCS7 is unable to replicate constrained flow conditions. As a result, the LOS is reported as acceptable although the freeway is considered at capacity during the peak hours for the freeway segments and ramp junctions, as observed in the field, at the following freeway facilities:

- I-15 northbound, north of Second Street (#5) – LOS F AM and PM peak hours
- I-15 northbound, south of Second Street (#8) – LOS F AM and PM peak hours
- I-15 northbound, on-ramp at Second Street – LOS F AM peak hour

Therefore, the TIA determines that these locations currently operate at a LOS F (Appendix L).

Table 4.13-6 Freeway Facility LOS for Existing (2020) Conditions

	Density[1]		LOS	
Mainline Segment	**AM**	**PM**	**AM**	**PM**
I-15 Southbound				
North of Second Street	31.7	32.2	D	D
Off-ramp at Second Street	32.1	32.2	D	D
On-ramp at Second Street	19.9	20.5	C	C
South of Second Street	18.3	19.2	C	B
I-15 Northbound				
North of Second Street	–[2]	–[2]	**F**	**F**
On-ramp at Second Street	**39.3**	30.0	**F**	D
Off-ramp at Second Street	24.8	17.5	C	B
South of Second Street	–[2]	–[2]	**F**	**F**

[1] Density is measured as pc/mi/ln = passenger cars per mile per lane

[2] Analysis with constrained flow results in acceptable LOS. However, field observations indicate congestion during the peak hour. Therefore, the freeway is considered at capacity.

BOLD = unacceptable LOS

Source: Urban Crossroads 2020 (Appendix L)

4.13.2 Regulatory Setting

a. State

Congestion Management Program

In 1990, the California Legislature enacted the Congestion Management Program (CMP) to implement Proposition 111, a statewide transportation funding proposal that required local governments to implement mitigation measures to offset the impacts from new development on the regional transportation system. The CMP addresses the impact of local growth on the regional transportation system; the goal is to examine the interactions among land use, transportation, and air quality and to make decisions at the regional and local level in consideration of these interactions.

When LOS requirements are not maintained on portions of the CMP highway and roadway system, a deficiency plan is required that analyzes the cause of the deficiency and the implementation costs of various alternatives such as roadway modifications, programs, or actions to measurably improve performance. Highways must maintain at least LOS E, which is defined by a level of service where traffic flow fluctuates in terms of speed and flow rates, operating speeds average 35 miles per hour. For arterial streets, LOS E occurs where queues of vehicles are waiting upstream of an intersection and it may take several signal cycles for a vehicle to clear the intersection. A jurisdiction failing to comply with the CMP may have its allocation of the State gas tax withheld.

There are no study area intersections identified as a Riverside County CMP facility (Appendix L).

Senate Bill 743

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

OPR to identify new metrics for identifying and mitigation transportation impacts within CEQA. In December 2018, the California Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). While a lead agency has the option to immediately apply the new VMT-based analysis methodology and thresholds for the purposes of evaluating transportation impacts, statewide application of the new guidelines is required July 1, 2020.

b. Regional

SCAG 2016 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization (MPO), a Regional Transportation Planning Agency, and a Council of Governments. The SCAG region contains six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy (SCS) and associated growth forecasts, regional transportation improvement programs, and regional housing needs allocations (SCAG 2018).

SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) in April 2016. The 2016 RTP/SCS is a long-range regional transportation and land use network plan that looks ahead 20 plus years and provides a vision of the region's future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS identifies major challenges as well as potential opportunities associated with growth, transportation finances, the future of airports in the region, and pending transportation system deficiencies that could result from regional growth. (SCAG 2016). The following goals are relevant to the project:

- **Goal 1:** Align the plan investments and policies with improving regional economic development and competitiveness.
- **Goal 2:** Maximize mobility and accessibility for all people and goods in the region.
- **Goal 3:** Ensure travel safety and reliability for all people and goods in the region.
- **Goal 6:** Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
- **Goal 7:** Actively encourage and create incentives for energy efficiency, where possible.
- **Goal 8:** Encourage land use and growth patterns that facilitate transit and active transportation.

Western Riverside County Transportation Uniform Mitigation Fee

In 2002, the cities of Riverside, Corona, and Moreno Valley, and Riverside County, agreed to participate in the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program, which is administered by WRCOG. TUMF is a multi-jurisdictional transportation mitigation fee program that funds transportation improvements associated with new growth. All new development in each of the participating jurisdictions is subject to TUMF and is required to contribute its fair share funding for construction of transportation facilities needed to maintain the requisite level of service critical to mobility in the region.

TUMF is imposed and implemented in every jurisdiction in Western Riverside County, and TUMF guidelines empower a local zone committee to prioritize and arbitrate certain projects. The project site is within the Northwest Zone, which has a five-year capital improvement program to prioritize certain roadway improvements necessary to accommodate regional growth (WRCOG n.d.).

c. Local

City of Norco General Plan

The City of Norco General Plan Circulation Element contains goals and policies to preserve and promote the City's unique road and equestrian circulation system. The following General Plan Circulation Element policies are relevant to the project:

- **Policy 1.2:** Establish a trail system that is separate and safe from vehicular traffic with appropriate (signalized as necessary) road and intersection crossings to maintain circularity of the trail system.
- **Policy 1.9:** Encourage a minimum Level of Service D for roadway segments and a minimum Level of Service D for intersections at peak hours under build out conditions.
- **Policy 1.11:** Encourage the reduction of vehicle trips through implementation of Transportation Demand Management strategies, such as requiring major employers to prepare Transportation Management Plans with provisions for carpooling, vanpooling, flexible work hours, etc.
- **Policy 2.5:** Continue to maintain and improve the City's system of equestrian trails to also meet the needs of pedestrians within the community.
- **Policy 4.1:** Require all new developments to provide adequate off-street parking based on expected parking needs.
- **Policy 4.2:** Provide adequate loading areas within off-street parking areas for all commercial and manufacturing land uses.

City of Norco Municipal Code

City of Norco Municipal Code Section 12.05.040 states that any and all construction work within the public right-of-way shall require an encroachment permit. Excavation work within the City's public right-of-way requires a street cut permit for the purpose of excavation in addition to any other required permits. All applications shall include a traffic control plan that shall be approved prior to the preconstruction meeting for the project. No disruption of traffic is allowed after 4:00 p.m. and before 8:00 a.m. unless specifically approved for these hours.

City of Norco Development Impact Fee Program

The City of Norco has implemented a local Development Impact Fee (DIF) Program to impose and collect fees from new development that may be used to mitigate the additional traffic burdens created by new development to the City's arterial and collector street system. A "Streets, Traffic Signals, and Bridges" fee is imposed on all new development in the City to finance the costs of street improvements, which include widening and reconstruction, new traffic signals, street landscaping, intersection improvements, and freeway interchange improvements. The project would be subject to the DIF Program and would be required to pay fees as part of permit approval.

4.13.3 Impact Analysis

a. Significance Thresholds

Appendix G of CEQA Guidelines states transportation and traffic impacts of the project would be significant if the project would:

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
d. Result in inadequate emergency access.

Intersection Thresholds

As stated in Section 4.13.1, *Setting*, the City of Norco and Caltrans utilize a "50 peak hour trip" criteria to identify intersections that need to be evaluated. This generally represents the minimum number of trips by which a typical intersection could be substantively impacted by a development.

For intersections located within Norco, a direct project impact would result if project-generated traffic would cause a deterioration from an acceptable LOS (LOS D or better) to an unacceptable LOS (LOS E or F). For intersections within Norco that already operate at an unacceptable LOS, a cumulative project impact would result if the project contributes 50 or more trips to the intersection during the AM or PM peak hours.

Vehicle Miles Traveled Thresholds

The City of Norco, consistent with other cities within WRCOG, uses WRCOG's VMT Screening Tool (Screening Tool). The Screening Tool allows the input of an APN to determine if a project's location meets one or more of the screening thresholds for land use projects identified in OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory). The City has adopted project level screening thresholds consistent with those recommended in the Technical Advisory and used by WRCOG's VMT Screening Tool (City Guidelines).

Consistent with the Technical Advisory, the City Guidelines provide details on appropriate screening criteria that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant transportation impact. Screening criteria are broken into the following four types:

- Transit Priority Area (TPA) Screening: Consistent with the Technical Advisory and City Guidelines, projects located within a TPA (i.e., within ½ mile of an existing "major transit stop" or an existing stop along a "high-quality transit corridor") may be presumed to have a less than significant impact, absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:
  - Has a Floor Area Ratio of less than 0.75;
  - Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
  - Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the MPO); or
  - Replaces affordable residential units with a smaller number of moderate- or high-income residential units.
- Project Type Screening: The City Guidelines identify local serving retail projects less than 50,000 square feet in floor area as having a less than significant impact, absent substantial evidence to the contrary. This is because local serving retail projects generally improve the convenience of shopping close to home and have the effect of reducing vehicle travel.

Similarly, local serving hotels (i.e., non-destination hotels) that tend to serve the local area would reduce the need for visitors of the City of Norco to travel outside of the City for lodging also have a less than significant transportation impact, absent substantial evidence to the contrary.

- Low VMT Area Screening: The Technical Advisory states, "residential and office projects that locate in areas with low VMT and that incorporate similar features such as density, mix of uses, and accessibility to other modes of transportation will tend to exhibit similarly low VMT." The project site should also be assessed via the Screening Tool, which utilizes the subregional travel demand model Riverside Transportation Analysis Model (RIVTAM) to measure VMT performance within the City of Norco for individual traffic analysis zones (TAZ's).
- Affordable Housing Screening: The Technical Advisory states, "Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT." The Technical Advisory further clarifies that "a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less than significant impact on VMT."

A land use project only needs to meet one of the above screening thresholds to result in a less-than-significant VMT impact (Appendix M).

b. Methodology

The TIA evaluated Existing (2020), Existing Plus Project (E+P), Opening Year Cumulative (2023) Without Project, and Opening Year Cumulative (2023) With Project conditions, and Horizon Year (2040) Conditions (Appendix L).

Existing Conditions

Baseline traffic data is included to characterize traffic conditions as they existed at the time of the project-specific TIA (Appendix L), which are summarized in Section 4.13.1, *Setting*, subsection (b) *Existing Traffic Volumes*.

Project Traffic

Development of project traffic generation estimates involve the use of a three-step process: trip generation, trip distribution, and trip assignment).

Project Traffic Generation

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is based on forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

The trip generation rates used to analyze the project are based on the following Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition, 2017) land use codes:

- Multifamily Housing (Mid-Rise, 3-10 floors) (ITE Land Use Code 221)
- Fast-Food Restaurant without Drive-Through Window (ITE Land Use Code 933)
- Hotel (ITE Land Use Code 310)

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator, which are often associated with retail uses. Therefore, pass-by percentages were obtained from the ITE Trip Generation Handbook (3rd Edition, 2017) and included in the project analysis for the proposed food garden use (Appendix L).

Patrons of the food garden may also visit other uses on the project site, such as the residential and hotel developments. without leaving the site. The ITE Trip Generation Handbook was utilized to determine the internal capture for the applicable mix of uses. Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site; trips may be made between individual restaurant, hotel, and residential uses on site and can be made either by walking or using internal circulation without using external streets. As such, an internal capture reduction was applied to recognize the interactions that would occur between the proposed land uses. The internal capture was based on the National Cooperative Highway Research Program's (NCHRP Report 684) internal capture trip capture estimation tool (Appendix L).

Project Traffic Distribution

The project trip distribution represents where traffic going to and from the project site would likely be allocated. The project trip distribution patterns for the proposed uses were developed based on an understanding of existing travel patterns in the area for each land use type, the geographical location of the site, and the site's proximity to the regional arterial and State highway system. Each of these distribution patterns were reviewed and approved by the City of Norco as part of the traffic study scoping process (included in Appendix 1.1 of the TIA [Appendix L]).

Project Trip Assignment

The assignment of traffic from the project site to the adjoining roadway system is based upon the project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time the project is operational.

Existing Plus Project (E+P) Condition

The E+P analysis determines any potential circulation system deficiencies that would occur on the existing roadway system in the scenario of the project being placed upon Existing (2020) conditions.

Opening Year Cumulative (2023) Conditions

The Opening Year Cumulative (2023) conditions analysis determines the potential near-term cumulative circulation system deficiencies. Traffic associated with other known cumulative development projects in conjunction with an ambient growth from Existing (2020) conditions of 6.12 percent (2 percent per year over 3 years, compounded annually) is included for Opening Year Cumulative (2023) traffic conditions to account for background traffic growth.

Horizon Year (2040) Conditions

Traffic projections for Horizon year (2040) conditions were derived from RIVTAM. The Horizon Year conditions analysis determines if improvements funded through regional transportation mitigation

fee programs (such as WRCOG's TUMF and DIFs) can accommodate long-range cumulative traffic at the target LOS identified in the City's General Plan.

c. Project Impacts and Mitigation Measures

Threshold 1:	Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact T-1 TWO PROJECT STUDY AREA INTERSECTIONS OPERATE AT UNACCEPTABLE LOS UNDER THE EXISTING (2020) CONDITIONS, AND WOULD CONTINUE TO DO SO WITH PROJECT TRIPS (E+P CONDITION); AND FIVE PROJECT STUDY AREA INTERSECTIONS WOULD OPERATE AT UNACCEPTABLE LOS UNDER THE HORIZON YEAR (2040) CONDITIONS BASED ON ANTICIPATED BACKGROUND TRAFFIC GROWTH. HOWEVER, THE PROJECT WOULD NOT CONFLICT WITH APPLICABLE GOALS IN SCAG'S 2016 RTP/SCS AND APPLICABLE POLICIES IN THE GENERAL PLAN CIRCULATION ELEMENT. IMPLEMENTATION OF MITIGATION MEASURE T-1 WOULD ENSURE THE PROJECT IMPACTS ARE LESS THAN SIGNIFICANT.

Construction

Project construction is expected to occur over approximately two 42 months and would comply with City of Norco Municipal Code Section 15.30.020, which prohibits construction activity between 7:00 p.m. and 7:00 a.m. on weekdays, and between 7:00 p.m. and 8:00 a.m. on weekends. Project construction activities, including equipment and supply staging and storage, would occur on the project site, and heavy trucks and equipment would access the site from Hamner Avenue and Third Street.

Construction activity would consist of phased site preparation and grading, building construction, architectural coating, and paving. After clearing the site, site preparation and grading activity would include establishing building pads and preparing for building construction. Construction equipment for the project would include tractors, bulldozers, graders, and scrapers for the site preparation and grading, and cranes, forklifts, welders, rollers, and other paving equipment for building construction and paving. Large equipment would be brought to the site for the duration of the phase it is scheduled to be used for, and then removed from the site.

The pedestrian facilities improvements and installation of project driveways could require the temporary closure or detours of travel lanes along Hamner Avenue and Third Street, though full roadway closure and traffic detours are not expected to be necessary. Construction activities are required to implement measures to facilitate the passage of persons and vehicles through/around any required temporary road restrictions, and ensure the safe passage in pursuant to City of Norco Municipal Code Section 12.05.040, which states that prior to any activity that would encroach into a right-of-way, a traffic control plan must be approved by the City to ensure that construction activities would not increase hazards and that no disruption of traffic would occur after 4:00 p.m. and before 8:00 a.m. Project compliance with the provisions of the City's Municipal Code would ensure project construction traffic impacts are less than significant.

Operation

The project would generate a total of 3,482 daily trips, including 267 and 278 during AM and PM peak hours, respectively. Table 4.13-7 shows the trip generation for the project.

Table 4.13-7 Project Trip Generation

Land Use	Size[1]	ITE Code[2]	Daily Trips	Estimated Trip Generation					
				AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Residential	**320 du**	**221**	**1,742**	**30**	**85**	**115**	**86**	**55**	**141**
Internal capture			-346	-2	-17	-19	-14	-14	-28
Subtotal Trips			**1,396**	**28**	**68**	**96**	**72**	**41**	**113**
Hotel	**128 rooms**	**310**	**1,070**	**35**	**25**	**60**	**39**	**38**	**77**
Internal capture			-238	-1	-2	-3	-11	-6	-17
Subtotal Trips			**832**	**34**	**23**	**57**	**28**	**32**	**60**
Food Garden	**8,700 sf**	**933**	**3,012**	**131**	**87**	**218**	**123**	**123**	**246**
Internal capture			-502	-19	-3	-22	-18	-23	-41
Pass-by reduction[4]			-1,256	-41	-41	-82	-50	-50	-100
Subtotal Trips			**1,254**	**71**	**43**	**114**	**55**	**50**	**105**
Total Project Trips			**3,482**	**133**	**134**	**267**	**155**	**123**	**278**

[1] du = dwelling unit; sf = square feet

[2] Source for trip generation ITE land use codes and rates: ITE Trip Generation Manual (10th Edition) 2017.

[3] Internal capture calculated from NCHRP 684 Internal Trip Capture Estimation Tool.

[4] Pass-by reduction percentages are based on the ITE Trip Generation Handbook (3rd Edition) 2017.

Source: Urban Crossroads 2020 (Appendix L)

Intersection Level of Service

Table 4.13-8 summarizes the intersection LOS analysis under Existing (2020) and E+P conditions. As shown in Table 4.13-3 and reiterated in Table 4.13-8, the following existing study area intersections operate at an unacceptable LOS during the peak hours under Existing (2020) conditions:

- Hamner Avenue and Sixth Street (#2): LOS E AM peak hour only
- Hamner Avenue and Second Street (#6): LOS E AM peak hour, LOS F PM peak hour

Implementation of the project would contribute to additional LOS impacts at these two intersections, listed above. However, project impacts to the Hamner Avenue and Sixth Street (#2) study intersection would result in a +1.1 second delay during AM peak hour and LOS would remain at LOS E. The Hamner Avenue and Second Street (#6) study intersection would result in a +55 second delay during AM peak hour under E+P conditions which would reduce intersection performance from LOS E to LOS F; and a greater than +3.2 second delay during PM peak hour under E+P conditions which would continue to operate at LOS F (Appendix L). Therefore, implementation of Mitigation Measure T-1 would ensure project impacts to study area intersection LOS are less than significant.

Table 4.13-8 Intersection LOS for E+P Conditions

#	Intersection	Traffic Control[2]	Existing (2020) Delay[1] (seconds) AM	Existing (2020) Delay[1] (seconds) PM	Existing (2020) LOS AM	Existing (2020) LOS PM	E+P Delay[1] (seconds) AM	E+P Delay[1] (seconds) PM	E+P LOS AM	E+P LOS PM
1	Project Driveway 1 and Third Street	CSS	15.5	11.0	C	B	18.2	12.5	C	B
2	Hamner Avenue and Sixth Street	TS	**63.2**	36.4	**E**	D	**64.3**	36.7	**E**	D
3	Hamner Avenue and Fourth Street	TS	20.1	21.7	C	C	25.6	21.8	C	C
4	Hamner Avenue and Third Street	TS	28.1	21.8	C	C	29.4	23.5	C	C
5	Hamner Avenue and Project Driveway 2	CSS	15.0	19.1	C	C	20.1	21.0	C	C
6	Hamner Avenue and Second Street	TS	**63.1**	**196.8**	**E**	**F**	**118.1**	**>200.0**	**F**	**F**
7	Interstate 15 (I-15) Southbound Ramps and Second Street	TS	16.9	13.4	B	B	20.2	15.2	C	B
8	I-15 Northbound Ramps and Second Street	TS	32.4	37.0	C	D	34.0	37.2	C	D

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = cross-street stop; TS = traffic signal

BOLD = unacceptable LOS

Source: Urban Crossroads 2020 (Appendix L)

LOS calculations were conducted for the study intersection to evaluate their operations under Horizon Year (2040) Without and With Project traffic conditions. As summarized in Table 4.13-9, the following intersections are anticipated to operate at an unacceptable LOS under both Horizon Year (2040) conditions:

- Hamner Avenue and Sixth Street (#2): LOS F AM and PM peak hours
- Hamner Avenue and Third Street (#4): LOS E AM peak hour only without project; LOS E AM and PM peak hours with project
- Hamner Avenue and Project Driveway 2 (#5): LOS F PM peak hour only without project; LOS E and F during AM and PM peak hours, respectively, with project
- Hamner Avenue and Second Street (#6): LOS F AM and PM peak hours
- I-15 Southbound Ramps & Second Street (#7): LOS E AM peak hour only without project; LOS E during AM and PM peak hours with project

Implementation of the project would contribute to additional LOS impacts at these five intersections, listed above, based on anticipated traffic growth. Therefore, implementation of Mitigation Measure T-1 would ensure project impacts to future (Horizon Year 2040) study area intersection LOS are less than significant.

Table 4.13-9 Intersection LOS for Horizon Year (2040) Conditions

#	Intersection	Traffic Control[2]	2040 Without Project				2040 With Project			
			Delay[1] (seconds)		LOS		Delay[1] (seconds)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Project Driveway 1 and Third Street	CSS	16.6	14.4	C	B	17.8	18.1	C	C
2	Hamner Avenue and Sixth Street	TS	**117.9**	**109.2**	**F**	**F**	**119.3**	**112.9**	**F**	**F**
3	Hamner Avenue and Fourth Street	TS	39.5	40.2	D	D	40.3	41.3	D	D
4	Hamner Avenue and Third Street	TS	**58.3**	52.3	**E**	D	**65.4**	**64.3**	**E**	**E**
5	Hamner Avenue and Project Driveway 2	CSS	24.3	**>100.0**	C	**F**	**44.6**	**>100.0**	**E**	**F**
6	Hamner Avenue and Second Street	TS	**161.4**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
7	Interstate 15 (I-15) Southbound Ramps and Second Street	TS	**62.2**	51.5	**E**	D	**72.6**	**76.3**	**E**	**E**
8	I-15 Northbound Ramps and Second Street	TS	43.7	44.8	D	D	45.3	52.5	D	D

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = cross-street stop; TS = traffic signal

BOLD = unacceptable LOS

Source: Urban Crossroads 2020 (Appendix L)

Traffic Signal Warrant

Traffic signal warrants were analyzed for E+P traffic conditions based on peak hour intersection turning movement volumes. With the addition of project traffic, the Hamner Avenue and Project Driveway 2 (#5) study intersection would operate at an unacceptable LOS during peak hours with the existing traffic control. The Hamner Avenue and Project Driveway 2 (#5) study intersection would be located approximately 400 feet south from the center of the Hamner Avenue and Third Street (#4) study intersection (Appendix L). Therefore, though the project would have a significant impact, the TIA did not recommend a traffic signal for Project Driveway 2 due to the proximity of the existing Hamner Avenue and Third Street intersection.

Existing Freeway Off-Ramp Queuing

A freeway off-ramp queuing analysis was performed for at the I-15 and Second Street interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-15 mainline. Queuing analysis findings are presented in Table 4.13-10, which show there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows with the addition of project traffic (Appendix L). Therefore, project impacts would be less than significant.

Table 4.13-10 Peak Hour Freeway Off-ramp Queuing Summary for E+P Conditions

				Existing (2020)				E+P			
				95th Percentile Queue (ft)		Acceptable?[2]		95th Percentile Queue (ft)		Acceptable?[2]	
#	Intersection	Movement[1]	Available Stacking Distance (feet)	AM	PM	AM	PM	AM	PM	AM	PM
7	I-15 Southbound Ramps and Second Street	SBT/L	1,500	82	119	Yes	Yes	90	119	Yes	Yes
		SBR	340	246	67	Yes	Yes	307[3]	71	Yes	Yes
8	I-15 Northbound Ramps and Second Street	NBL	640	387	270	Yes	Yes	405	277	Yes	Yes
		NBT/L	1,265	393	267	Yes	Yes	411	283	Yes	Yes
		NBR	1,265	64	74	Yes	Yes	73	74	Yes	Yes

[1] SBT/L = southbound thru-left; SBR = southbound right turn; NBL = northbound left turn; NBT/L = northbound thru-left; NBR = northbound right turn

[2] Stacking distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

[3] 95th percentile volume exceeds capacity; queue may be longer.

Source: Urban Crossroads 2020 (Appendix L)

Existing Freeway Facilities

As shown in Table 4.13-5 and reiterated in Table 4.13-11, the following freeway segments and ramp junctions are considered at capacity and operating at during peak hours based on field observations made for the TIA (Appendix L) under Existing (2020) conditions:

- I-15 northbound, north of Second Street – LOS F AM and PM peak hours
- I-15 northbound, south of Second Street – LOS F AM and PM peak hours
- I-15 northbound, on-ramp at Second Street – LOS F AM peak hour

Implementation of the project would contribute to additional LOS impacts at these freeway facilities. However, project impacts to the I-15 northbound, on-ramp at Second Street would result in a 0.2 increase in density during AM peak hour and LOS would remain at LOS F. The I-15 northbound, north and south of Second Street freeway segments operate at capacity and LOS F based on field observations under Existing (2020) conditions, and would continue to do so under E+P conditions (Appendix L).

The Riverside County Transportation Commission, in partnership with Caltrans, is investing $455 million to improve I-15 between Cajalco Road and SR-60. The “I-15 Express Lanes Project” will add two tolled express lanes in each direction, with multiple entrances and exits. Construction began in 2018, and the express lanes will be open to traffic in July 2020. However, since this improvement will not be completed until July 2020 and since there are no other planned improvements to I-15 at this time, no improvements have been evaluated for E+P conditions.

Neither Caltrans nor the State have adopted a fee program that can ensure that locally-contributed DIFs will be tied to improvements to freeway mainlines, and only Caltrans has the jurisdiction over mainline improvements. Because Caltrans has exclusive control over State highway improvements, ensuring that fair share contributions to mainline improvements are part of a program tied to project implementation is within the jurisdiction of Caltrans.

Under E+P conditions, the I-15 northbound, on-ramp at Second Street and I-15 northbound, north and south of Second Street freeway segments would continue operating at LOS F, similar to Existing (2020) conditions. Therefore, project impacts would be less than significant.

Table 4.13-11 Freeway Facility LOS for E+P Conditions

Mainline Segment	Lanes on Freeway[1]	Existing (2020)				E+P			
		Density[2]		LOS		Density[2]		LOS	
		AM	PM	AM	PM	AM	PM	AM	PM
I-15 Southbound									
North of Second Street	3	31.7	32.2	D	D	31.9	32.5	D	D
Off-ramp at Second Street	4	32.1	32.2	D	D	32.2	32.3	D	D
On-ramp at Second Street	5	19.9	20.5	C	C	19.9	20.5	C	C
South of Second Street	4	18.3	19.2	C	B	18.3	19.3	C	C
I-15 Northbound									
North of Second Street	3	**–[3]**	**–[3]**	**F**	**F**	**–[3]**	**–[3]**	**F**	**F**
On-ramp at Second Street	4	**39.3**	30.0	**F**	D	**39.5**	30.1	**F**	D
Off-ramp at Second Street	5	24.8	17.5	C	B	24.8	17.6	C	B
South of Second Street	4	**–[3]**	**–[3]**	**F**	**F**	**–[3]**	**–[3]**	**F**	**F**

BOLD = unacceptable LOS

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured as pc/mi/ln = passenger cars per mile per lane

[3] Analysis with constrained flow results in acceptable LOS. However, field observations indicate congestion during the peak hour. Therefore, the freeway is considered at capacity.

Source: Urban Crossroads 2020 (Appendix L)

Transit and Alternative Transportation Facilities

As described in Section 2, *Project Description*, the project would include features to encourage modes of alternative transportation. Such features include the provision of bicycle racks for patrons and guests of the proposed food garden and hotel uses, a horse paddock and equestrian trail on the project site to be connected to the existing Class 1 equestrian trail along the Third Street project frontage, and pedestrian facilities improvements near the proposed project driveways on Hamner Avenue and Third Street. The project also includes the provision of pedestrian circulation on site to ensure pedestrian access to proposed uses. The pedestrian and equestrian circulation pathways on the project site are designed in compliance with applicable City design guidelines.

Implementation of the project would not hinder access to the existing bus stops located along Hamner Avenue within 1,000 feet of the project site. Furthermore, the project would not conflict with applicable goals in SCAG's 2016 RTP/SCS, as demonstrated in Table 4.10-4 and applicable policies in the General Plan Circulation Element, as demonstrated in Table 4.10-5 in Section 4.10, *Land Use and Planning.* Therefore, project impacts would be less than significant.

Mitigation Measures

T-1 Intersection LOS Improvements

The following improvements shall be implemented to ensure an acceptable LOS with project traffic:

a. Hamner Avenue and Sixth Street Intersection.
   i. The southbound approach shall be restriped to provide dual left turn lanes, one through lane, and one shared through-right turn lane.
   ii. The traffic signal timing shall be modified to optimize the cycle lengths and splits during the AM and PM peak hours.
   iii. The northbound approach shall be restriped to provide one left turn lane, two through lanes, and one shared through-right turn lane.
b. Hamner Avenue and Second Street Intersection.
   i. A second southbound turn lane shall be added.
   ii. The southbound de facto right turn late shall be striped.
   iii. The traffic signal to run the northbound and southbound left turns shall be modified as lead-lag, with the southbound left turn running as lag, protect the eastbound and westbound left turns, and run the eastbound and westbound left turns and lead-lag, with the westbound left running as lag. Northbound and southbound left turns shall run separately (not concurrently).
   iv. The eastbound approach to provide dual left turn lane, one through lane, and one shared through-right turn lane shall be restriped.
   v. The westbound approach to provide dual left turn lanes, one through lane, and one right turn lane shall be restriped.
c. Hamner Avenue and Third Street Intersection.
   i. The northbound approach shall be restriped to provide dual left turn lanes, two through lanes, and one shared through-right turn lane.
   ii. The southbound approach shall be restriped to provide one left turn lane, two through lanes, and one shared through-right turn lane.
d. Hamner Avenue and Project Driveway 2 Intersection.
   i. The northbound approach shall be restriped to provide a 3rd northbound through lane.
   ii. The southbound approach shall be restriped to provide a 3rd southbound through lane.
e. I-15 Southbound ramps and Second Street Intersection: An eastbound right turn lane shall be added.

Significance After Mitigation

Implementation of Mitigation Measure T-1 would improve LOS for the Hamner Avenue and Sixth Street, and Hamner Avenue and Second Street intersections to an acceptable LOS, as shown in Table 4.13-12 and Table 4.13-13. Implementation of Mitigation Measure T-1 would ensure potential LOS impacts are less than significant under E+P Conditions and future traffic growth under the Horizon Year (2040) conditions.

Table 4.13-12 Intersection LOS for E+P Conditions with Mitigation Measure T-1

#	Intersection	Traffic Control[1]	Delay (seconds)[2] AM	Delay (seconds)[2] PM	Level of Service AM	Level of Service PM
2	**Hamner Avenue and Sixth Street**					
Existing (2020) Conditions						
Without Improvements		TS	**63.2**	36.4	**E**	D
With Improvements[3]		TS	34.2	31.0	C	C
E+P Conditions						
Without Improvements		TS	**64.3**	36.7	**E**	D
With Improvements[3]		TS	34.9	31.3	C	C
6	**Hamner Avenue and Second Street**					
Existing (2020) Conditions						
Without Improvements		TS	**63.1**	**196.8**	**E**	**F**
With Improvements[4]		TS	40.4	41.9	D	D
E+P Conditions						
Without Improvements		TS	**118.1**	**>200.0**	**F**	**F**
With Improvements[4]		TS	54.6	44.9	D	D

[1] TS = traffic signal

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] Improvement includes optimization of the traffic signal cycle lengths and splits for the I-15/Sixth Street interchange corridor.

[4] Improvement includes modification of the traffic signal to run the northbound and southbound protected left turns as lead-lag, with the southbound left turn running as lag.

BOLD = unacceptable LOS

Source: Urban Crossroads 2020 (Appendix L)

Table 4.13-13 Intersection LOS for Horizon Year (2040) Conditions with Mitigation Measure T-1

#	Intersection	Traffic Control[1]	Delay (seconds)[2] AM	Delay (seconds)[2] PM	Level of Service AM	Level of Service PM
2	**Hamner Avenue and Sixth Street**					
	Without Project	TS	53.2	53.8	D	D
	With Project	TS	54.8	54.8	D	D
4	Hamner Avenue and Third Street					
	Without Project	TS	52.6	33.5	D	C
	With Project	TS	55.0	41.2	D	D
5	**Hamner Avenue and Project Driveway 2**					
	Without Project[3]	CSS	14.6	15.4	B	C
	With Project[3]	CSS	19.7	22.2	C	C
6	**Hamner Avenue and Second Street**					
	Without Project[4]	TS	52.3	52.5	D	D
	With Project[4]	TS	53.8	53.3	D	D
7	**I-15 SB Ramps and Second Street**					
	Without Project	TS	34.5	43.5	C	D
	With Project	TS	36.8	48.5	D	D

[1] TS = traffic signal, CSS = Cross-street Stop

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] Improvement consists of restriping the existing pavement to provide a 3rd northbound and southbound through lane, consistent with the City of Norco's Circulation Element.

[4] Improvement includes restriping the eastbound and westbound shared left-through lane to an exclusive through lane; modification of the traffic signal to run the northbound and southbound left turns as lead-lag, with the southbound left turn running as lag, protect the eastbound and westbound left turns, and run the eastbound and westbound left turns as lead-lag, with the westbound left turn running as lag; and restriping the eastbound approach to provide two left turn lanes, one through lane, and one shared through-right turn lane, and restriping the westbound approach to provide two left turn lanes, one through lane, and one right turn lane.

BOLD = unacceptable LOS

Source: Urban Crossroads 2020 (Appendix L)

Threshold 2:	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Impact T-2 THE PROJECT MEETS THE PROJECT TYPE AND LOW VMT AREA SCREENING CRITERIA IN OPR'S TECHNICAL ADVISORY AND THE CITY'S VMT GUIDELINES. THE PROJECT SITE IS LOCATED IN A TRAFFIC RIVTAM TRAFFIC ANALYSIS ZONE THAT CONTAINS MIXED-USES SIMILAR IN NATURE TO PROPOSED PROJECT USES. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project was reviewed under the four screening criteria, consistent with the Technical Advisory and City (Appendix M):

- TPA Screening: The project site is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor. Therefore, the project does not meet the TPA screening criteria.
- Project Type Screening: The proposed 8,700 square foot food garden is below the 50,000 square foot project screening criteria for local serving retail projects; and would serve project residents, the Norco College community, and surrounding residents. The proposed 120-room hotel also qualifies for project type screening since it would provide convenient lodging and meeting space for visitors of Norco College, the Silver Lakes Sports Complex, and the surrounding community. The proposed hotel would reduce the need for longer vehicle trips for City visitors to other hotels in neighboring cities of Corona and Ontario. Therefore, the project meets the project type screening criteria.
- Low VMT Area Screening: The project is consistent with the low VMT area criteria as the proposed multi-family residential, food garden (commercial food retail), and hotel uses are generally consistent with the existing mixed-use nature of the surrounding area. According to the Screening Tool, the project site is within a low VMT-generating TAZ as compared to the City average (Appendix M). The project site is located within RIVTAM TAZ 3177 which contains a service population of residents, retail employees, and employees of other industries, institutions, and/or agencies. The proposed project uses to be collocated on the site would, therefore, be consistent with the mixed-use nature of RIVTAM TAZ 3177 TAZ and the project meets the Technical Advisory's low VMT area screening threshold.
- Affordable Housing Screening: The proposed residential units would be available at market rate; the project does not include an affordable housing component. Therefore, the project does not meet the affordable housing screening criteria.

The project meets the project type and low VMT area screening criteria, based on project review according to the City's VMT screening criteria guidelines. No additional VMT analysis was determined to be required for the project (Appendix M). Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3:	Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Impact T-3 PROPOSED DRIVEWAYS AND VEHICULAR, PEDESTRIAN, AND EQUESTRIAN CIRCULATION PATHWAYS ON THE PROJECT SITE WOULD COMPLY WITH APPLICABLE CITY DESIGN GUIDELINES, AND PROPOSED RESIDENTIAL AND COMMERCIAL USES ARE PERMITTED UNDER EXISTING ZONING REGULATIONS AND COMPATIBLE WITH EXISTING ADJACENT USES. HOWEVER, IMPROVEMENTS ON AND OFF-SITE WOULD FURTHER ENHANCE SAFE SITE ACCESS. THEREFORE, IMPLEMENTATION OF MITIGATION MEASURE T-2 WOULD ENSURE THE PROJECT IMPACTS ARE LESS THAN SIGNIFICANT.

As shown in the project site plans (Appendix B), proposed project driveways off Hamner Avenue and Third Street and all proposed vehicular, pedestrian, and equestrian circulation pathways on the project site are designed in compliance with applicable City design guidelines and do not feature any geometric design features such as sharp curves or dangerous intersections. The City's construction permitting process includes review of project site plans to ensure that no potentially hazardous transportation design features are introduced by the project. For example, sight distance at each of the two proposed driveways would be reviewed for conformance with City of Norco sight distance standards at the time of permitting approvals for grading, landscape, on site circulation construction, and street improvement plans.

According to the TIA (Appendix L), there are no traffic movements that are anticipated to experience queuing issues during the weekday AM or PM peak 95th percentile traffic flows under all project conditions that were analyzed. However, street frontage improvements along Hamner Avenue and Third Street, consistent with the City's standards, would enhance site access and safety for project residents, employees, and patrons. Additional off-site improvements to existing roadway queuing would also enhance site accessibility. Therefore, Mitigation Measure T-2 includes site adjacent and site access improvements to ensure project site access impacts are less than significant.

Proposed uses entail residential, commercial food retail, and visitor-serving hotel uses that would be enhanced by the proposed equestrian trail on site to reinforce Norco's equestrian lifestyle. There are no agricultural uses proposed for the project site that would include incompatible uses. As discussed in Section 4.10, *Land Use and Planning*, all proposed uses for the project site would be permitted under existing zoning regulations and would be compatible with existing adjacent uses. Therefore, project impacts would be less than significant.

Mitigation Measures

T-2 Site Adjacent and Site Access Improvements

The following improvements shall be implemented to accommodate site access and ensure project traffic impacts to existing roadways and vicinity are less than significant:

a. Project Driveway 1 and Third Street Intersection. The following improvements are necessary to accommodate site access and future 95th percentile queues:
   i. Based on the queuing analysis of the Project Driveway 1 and site adjacent intersection of Hamner Avenue and Third Street, the existing median and westbound left turn pocket shall be modified to accommodate a minimum of 60-feet of storage.

ii. A stop control on the northbound approach and shared left-through-right turn lane (driveway) shall be installed.

b. Hamner Avenue and Third Street. The following improvement is necessary to accommodate future 95th percentile queues: The existing median and eastbound left turn pocket shall be modified to provide a minimum of 240-feet of storage and 300-feet of storage for the northbound left turn pockets on Hamner Avenue.

c. Hamner Avenue and Project Driveway 2. The following improvements are necessary to accommodate site access:

   i. Restrict access to right-in/right-out/left-in only.

   ii. A stop control on the eastbound approach and a shared left-through-right turn lane (driveway) shall be installed.

d. Third Street and Hamner Avenue. Curb, gutter, and sidewalk improvements shall be made to the Third Street and Hamner Avenue project site frontages to accommodate site access, consistent with City standards.

Significance After Mitigation

Implementation of Mitigation Measure T-2 would ensure safe project site accessibility by residents, project employees, and patrons, and reduce potential off-site impacts to existing roadways and vicinity by providing adequate queue storage on Hamner Avenue. Implementation of Mitigation Measure T-2 would ensure project site access impacts are less than significant.

Threshold 4: Would the project result in inadequate emergency access?

Impact T-4 THE PROJECT WOULD COMPLY WITH APPLICABLE CITY AND RIVERSIDE COUNTY FIRE DEPARTMENT REQUIREMENTS TO MAINTAIN ADEQUATE SITE ACCESS FOR EMERGENCY RESPONDERS AND VEHICLES DURING PROPOSED TEMPORARY CONSTRUCTION ACTIVITIES AND LONG-TERM OPERATIONAL USES. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Project construction activities, including equipment and supply staging and storage, would occur on the project site and would not restrict access of emergency vehicles to the project site or adjacent areas. Proposed sidewalk and roadway improvements and installation of the driveways could require the temporary closure of travel lanes, but full roadway closure and traffic detours on Third Street and Hamner Avenue are not expected to occur nor to be necessary.

However, construction activities may temporarily restrict vehicular traffic that could increase hazards. Therefore, project construction activities would be required to implement traffic control measures to facilitate the passage of persons and vehicles through and around any temporary road restrictions resulting from project construction activities, and ensure the safe passage in accordance with City of Norco Municipal Code Section 12.05.040, which states that prior to any activity that would encroach into a right-of-way, a traffic control plan must be approved by the City to ensure that construction activities would not increase hazards and that no disruption of traffic would occur after 4:00 p.m. and before 8:00 a.m. Therefore, project impacts to construction-related emergency access would be less than significant.

Operation

As described in Section 2, *Project Description*, and shown in the project site plan (Appendix B), the project includes two driveways along Hamner Avenue and Third Street that would provide primary and secondary vehicular access to the project site, respectively. The proposed driveways and pedestrian sidewalk improvements along Hamner Avenue and Third Street would provide adequate and safe circulation to, from, and throughout the project site. Project site access for emergency responders would also be via the two proposed driveways.

Parking areas throughout the project site would include placards for project residents, guests, and patrons to ensure adequate emergency access for emergency responders and vehicles are maintained during project operation (i.e., “no parking” and “keep clear” signage), as required and verified by the City and the Riverside County Fire Department (RCFD) during operational permitting and inspections. Therefore, project impacts to operation-related emergency access would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.13.4 Cumulative Impacts

The planned and pending projects in the project site vicinity are listed in Table 3-1 of Section 3, *Environmental Setting*. Although it is unlikely that all of the cumulative projects would be fully built and occupied by Year 2023, they have been included in an effort to conduct a conservative analysis and overstate potential traffic deficiencies. Any other cumulative projects located beyond the cumulative study area that are not expected to contribute measurable traffic to study area intersections were not been included since the traffic would dissipate due to the distance from the project site and study area intersections. Any additional traffic generated by other projects not on the cumulative projects list is likely accounted for through background ambient growth factors applied to the peak hour volumes at study area intersections (Appendix L).

The Opening Year Cumulative (2023) conditions analysis, contained in the TIA (Appendix L), determines the potential near-term cumulative circulation system deficiencies. Scenarios analyzed include the following:

- **Opening Year Cumulative (2023) without Project.** This scenario includes Existing (2020) condition traffic volumes, plus an ambient growth factor of 6.12 percent, plus traffic from pending and approved but not yet constructed known development projects in the area.
- **Opening Year Cumulative (2023) with Project.** This scenario includes Existing (2020) condition traffic volumes, plus an ambient growth factor of 6.12 percent, plus traffic from pending and approved but not yet constructed known development projects in the area, plus project traffic.

Intersection Level of Service

Intersection LOS for Opening Year Cumulative (2023) conditions are shown in Table 4.13-14. Similar to Existing (2020) conditions and E+P conditions, Opening Year Cumulative (2023) without and with

Project conditions would result in LOS E or lower for the Hamner Avenue and Sixth Street (#2) intersection and the Hamner Avenue and Second Street (#6) intersection. These two intersections would have a LOS E or LOS F without the project; cumulative project traffic would cause an incremental increase in performance delay, though intersection LOS would continue to be at unacceptable levels (Appendix L). Therefore, implementation of Mitigation Measure T-1 would ensure cumulative project impacts on study intersections are less than significant.

Table 4.13-14 Intersection LOS for Opening Year Cumulative (2023) Conditions

			2023 without Project				2023 with Project			
			Delay[1] (seconds)		LOS		Delay[1] (seconds)		LOS	
#	Intersection	Traffic Control[2]	AM	PM	AM	PM	AM	PM	AM	PM
1	Project Driveway 1 and Third Street	CSS	16.5	11.4	C	B	19.7	13.0	C	B
2	Hamner Avenue and Sixth Street	TS	**69.7**	40.4	**E**	D	**70.1**	40.7	**E**	D
3	Hamner Avenue and Fourth Street	TS	26.7	23.1	C	C	26.8	23.3	C	C
4	Hamner Avenue and Third Street	TS	29.0	24.1	C	C	34.9	25.7	C	C
5	Hamner Avenue and Project Driveway 2	CSS	17.0	21.7	C	C	24.3	25.3	C	D
6	Hamner Avenue and Second Street	TS	**80.3**	**>200.0**	**F**	**F**	**113.8**	**>200.0**	**F**	**F**
7	I-15 Southbound Ramps and Second Street	TS	24.3	19.0	C	B	25.2	19.6	C	B
8	I-15 Northbound Ramps and Second Street	TS	37.2	44.4	D	D	37.8	44.8	D	D

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = cross-street stop; TS = traffic signal

BOLD = unacceptable LOS

Source: Urban Crossroads 2020 (Appendix L)

Traffic Signal Warrant

Traffic signal warrants were analyzed for Opening Year Cumulative (2023) traffic conditions based on peak hour intersection turning movements volumes. There are no additional unsignalized study area intersections anticipated to meet or exceed peak hour volume-based traffic signal warrants under Opening Year Cumulative (2023) without Project and with Project traffic conditions, in addition to the location warranted under E+P traffic conditions (Appendix L). Therefore, cumulative project impacts on traffic signal warrants would be less than significant and no additional mitigation measure are required.

Freeway Off-Ramp Queuing

A freeway off-ramp queuing analysis was performed for the I-15 and Second Street interchange for Opening Year Cumulative (2023) scenarios to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-15 mainline. Queuing analysis findings are presented in Table 4.13-15, which show there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows with the addition of project traffic (Appendix L). Therefore, cumulative project impacts on freeway off-ramp queuing would be less than significant and no additional mitigation measures are required.

Table 4.13-15 Peak Hour Freeway Off-ramp Queuing Summary for E+P Conditions

				2023 without Project				2023 with Project			
			Available Stacking Distance (feet)	95th Percentile Queue (ft)		Acceptable?[2]		95th Percentile Queue (ft)		Acceptable?[2]	
#	Intersection	Movement[1]		AM	PM	AM	PM	AM	PM	AM	PM
7	I-15 southbound ramps and Second Street	SBT/L	1,500	76	121	Yes	Yes	76	121	Yes	Yes
		SBR	340	519[3,4]	103	Yes	Yes	556[3,4]	141	Yes	Yes
8	I-15 northbound ramps and Second Street	NBL	640	472	355[3]	Yes	Yes	485	393[3]	Yes	Yes
		NBT/L	1,265	477	365[3]	Yes	Yes	491	397[3]	Yes	Yes
		NBR	1,265	119	86	Yes	Yes	131	86	Yes	Yes

[1] SBT/L = southbound thru-left; SBR = southbound right turn; NBL = northbound left turn; NBT/L = northbound thru-left; NBR = northbound right turn

[2] Stacking distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

[3] 95th percentile volume exceeds capacity; queue may be longer.

[4] Although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-15 mainline.

Source: Urban Crossroads 2020 (Appendix L)

Freeway Facilities

As shown in Table 4.13-16, the following study area freeway segments and merge/diverge ramp junctions are anticipated to operate at an unacceptable LOS (i.e., LOS E or worse) during the peak hours under Opening Year Cumulative (2023) without Project conditions:

- I-15 southbound, north of Second Street – LOS E AM and PM peak hours
- I-15 northbound, north of Second Street – LOS F AM and PM peak hours

- I-15 northbound, on-ramp at Second Street – LOS F AM peak hour only
- I-15 northbound, off-ramp at Second Street – LOS F AM peak hour only
- I-15 northbound, south of Second Street – LOS F AM and PM peak hours

There are no additional study area freeway segments or merge/diverge ramp junctions anticipated to operate at an unacceptable LOS under the Opening Year Cumulative (2023) with Project conditions.

Table 4.13-16 Freeway Facility Analysis for Opening Year Cumulative (2023) Conditions

		2023 without Project				2023 with Project			
		Density[2]		LOS		Density[2]		LOS	
Mainline Segment	Lanes on Freeway[1]	AM	PM	AM	PM	AM	PM	AM	PM
I-15 Southbound									
North of Second Street	3	**37.5**	**37.0**	**E**	**E**	**37.8**	**37.3**	**E**	**E**
Off-ramp at Second Street	4	34.7	34.3	D	D	34.8	34.4	D	D
On-ramp at Second Street	5	21.6	22.2	C	C	21.6	22.2	C	C
South of Second Street	4	19.7	21.1	C	B	19.8	21.2	C	C
I-15 Northbound									
North of Second Street	3	**–[3]**	**–[3]**	**F**	**F**	**–[3]**	**–[3]**	**F**	**F**
On-ramp at Second Street	4	**43.7**	33.1	**F**	D	**43.9**	33.2	**F**	D
Off-ramp at Second Street	5	**63.8**	19.3	**F**	C	**64.3**	19.4	**F**	C
South of Second Street	4	**–[3]**	**–[3]**	**F**	**F**	**–[3]**	**–[3]**	**F**	**F**

BOLD = unacceptable LOS

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured as pc/mi/ln = passenger cars per mile per lane

[3] Analysis with constrained flow results in acceptable LOS. However, field observations indicate congestion during the peak hour. Therefore, the freeway is considered at capacity.

Source: Urban Crossroads 2020 (Appendix L)

As stated in the discussion for Impact T-1, the RCTC, in partnership with Caltrans, is investing $455 million to improve I-15 between Cajalco Road and SR-60. The "I-15 Express Lanes Project" will add two tolled express lanes in each direction, with multiple entrances and exits. Construction began in 2018, and the express lanes will be open to traffic in July 2020.

Caltrans typically assumes a reduction of 14 percent to the freeway mainline through volumes to account for vehicles utilizing the express lanes. The reduction to I-15 mainline volumes (14 percent per lane for two lanes, or 28 percent total) was applied to account for the proposed express lanes. The analysis was performed assuming the same number of mixed-flow lanes and on- and off-ramp configurations as existing baseline conditions at I-15 study area interchanges.

As shown in Table 4.13-17, the I-15 mainline segments and merge/diverge ramp junctions are anticipated to improve operations to acceptable LOS during the peak hours with the completion of the I-15 Express Lane Project. Therefore, cumulative project impacts on freeway facilities would be less than significant and no additional mitigation measures are required.

Table 4.13-17 Freeway Facility LOS for Opening Year Cumulative (2023) with Project Conditions with Improvements

Mainline Segment	Lanes on Freeway[1]	2023 with Project				2023 with Project with Improvements			
		Density[2]		LOS		Density[2]		LOS	
		AM	PM	AM	PM	AM	PM	AM	PM
I-15 Southbound									
North of Second Street	3	**37.8**	**37.3**	**E**	**E**	23.9	23.7	C	C
Off-ramp at Second Street	4	34.8	34.4	D	D	27.8	27.4	C	C
On-ramp at Second Street	5	21.6	22.2	C	C	15.1	15.6	B	B
South of Second Street	4	19.8	21.2	C	C	14.7	15.9	B	C
I-15 Northbound									
North of Second Street	3	**–[3]**	**–[3]**	**F**	**F**	32.1	23.3	D	C
On-ramp at Second Street	4	**43.9**	33.2	**F**	D	30.3	25.5	D	C
Off-ramp at Second Street	5	**64.3**	19.4	**F**	C	19.7	14.5	B	C
South of Second Street	4	**–[3]**	**–[3]**	**F**	**F**	20.7	14.7	C	B

BOLD = unacceptable LOS

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured as pc/mi/ln = passenger cars per mile per lane

[3] Analysis with constrained flow results in acceptable LOS. However, field observations indicate congestion during the peak hour. Therefore, the freeway is considered at capacity.

Source: Urban Crossroads 2020 (Appendix L)

Mitigation Measures

Mitigation Measure T-1 (as stated above) would be required to reduce cumulative impacts to intersection LOS performance.

Significance After Mitigation

Implementation of Mitigation Measure T-1 would improve LOS for the Hamner Avenue and Sixth Street, and Hamner Avenue and Second Street intersections to an acceptable LOS under Opening Year Cumulative (2023) with Project conditions, as shown in Table 4.13-18. Implementation of Mitigation Measure T-1 would ensure potential cumulative LOS impacts are less than significant.

Table 4.13-18 Intersection LOS for Opening Year Cumulative (2023) Conditions with Mitigation Measure T-1

			Delay (seconds)[2]		Level of Service	
#	Intersection	Traffic Control[1]	AM	PM	AM	PM
2	**Hamner Avenue and Sixth Street**					
Without Project		TS	36.1	32.0	D	C
With Project[3]		TS	37.0	32.5	D	C
6	**Hamner Avenue and Second Street**					
Without Project		TS	39.3	37.2	D	D
With Project[4]		TS	42.7	37.6	D	D

BOLD = unacceptable LOS

[1] TS = traffic signal

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] Improvement includes optimization of the traffic signal cycle lengths and splits for the I-15/Sixth Street interchange corridor.

[4] Improvement includes modification of the traffic signal to run the northbound and southbound protected left turns as lead-lag, with the southbound left turn running as lag.

Source: Urban Crossroads 2020 (Appendix L)

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4.14 Utilities and Service Systems

This section analyzes the project's potential impacts on utilities and service systems. The analysis contains a description of existing utilities systems and systems, the regulatory setting for utilities and service systems, and a discussion of anticipated demand on utilities and services from proposed project uses.

The analysis is based on the Preliminary Hydrology Study prepared by Fuscoe Engineering, Inc. (2020) which is included as Appendix I. The contents and methodology of the Preliminary Hydrology Study are further discussed in Section 4.9, *Hydrology and Water Quality*.

4.14.1 Setting

The following section describes the existing setting with respect to wastewater treatment providers, water suppliers, stormwater drainage facilities, solid waste facilities, electricity and natural gas providers, and telecommunications facilities serving the project site.

a. Water Supply

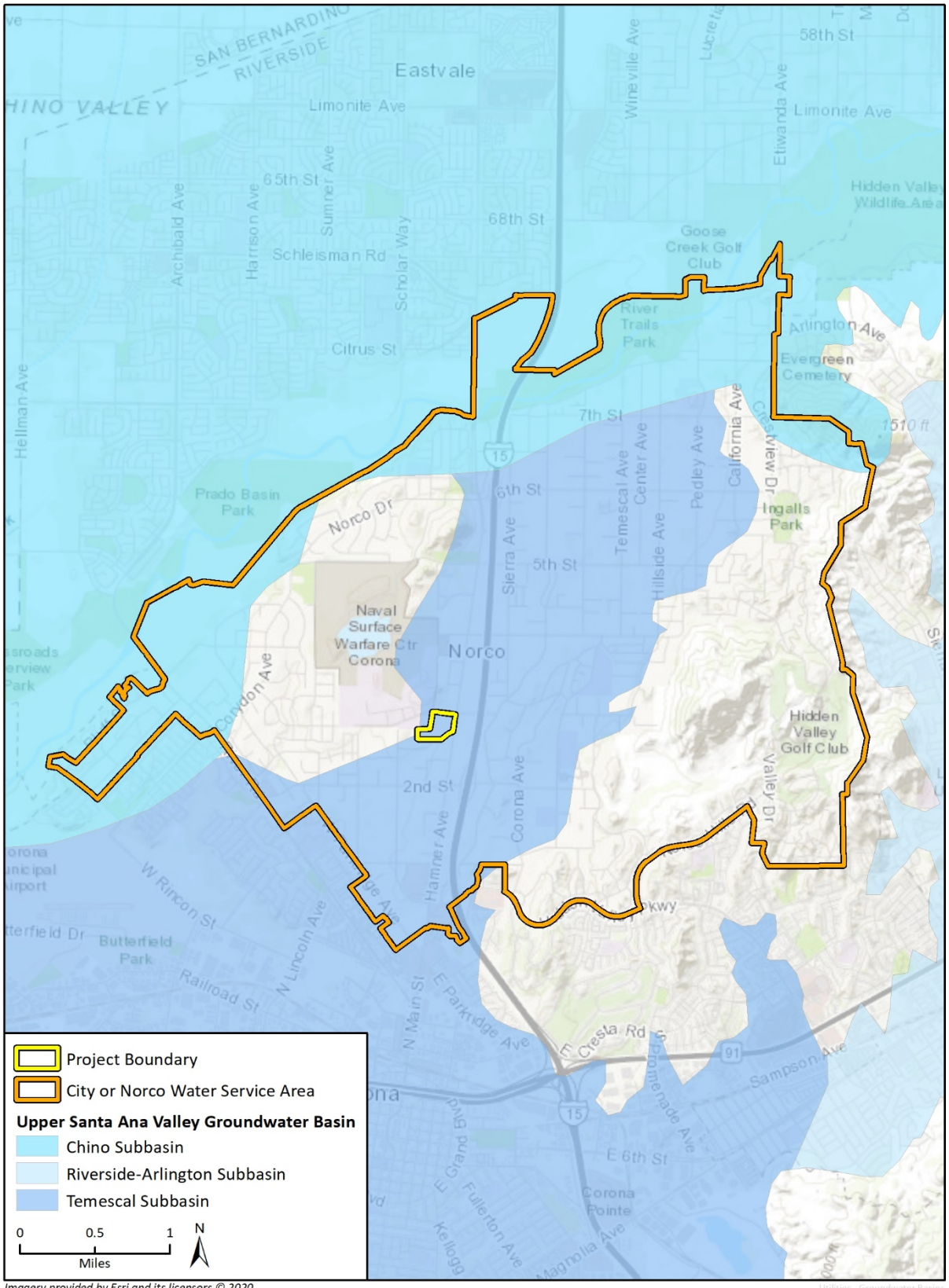
According to the City of Norco's 2015 Urban Water Management Plan (UWMP), the City owns and operates a potable domestic drinking water system, wastewater collection system, and recycled water system within the City's boundaries and provides management through its Water Utility Division. The service is contiguous with the City boundaries and has undergone relatively small changes since incorporation with exception of one annexation area (SilverLakes Park) totaling approximately 122.0 acres, within the Santa Ana River Watershed. The City is a member agency of the Chino Desalter Authority (CDA), a Joint Powers Authority. The City is an appropriator in the Chino Basin and a part of the Chino Basin Judgement. The City is also a member of the Western Riverside County Regional Wastewater Authority (WRCRWA), a Joint Powers Authority.

The City's primary source of water is pumped groundwater from the Temescal and Chino water basins. Currently, local groundwater from the Temescal Groundwater Basin contributes about thirty percent of the City's annual water production. In addition to its local groundwater supply, the City entered into an agreement with Western Municipal Water District (Western) to purchase 4,400 acre-feet (AF) of treated groundwater to meet its annual water demands, which is obtained through a metered connection to the City of Corona. The City purchases reverse osmosis treated water from the CDA and the Arlington Desalter. As a member agency of the CDA, the City has agreed to purchase 1,000 AF annually of treated groundwater and actively participates in regional management of the authority and Chino Basin. Figure 4.14-1 shows the boundaries of groundwater basins from which the City extracts water.

The City's water service area serves the 26,386 City residents (DOF 2019). The City contains a State of California prison which houses a population of approximately 3,000 inmates; these individuals are included in the overall population. The City currently serves approximately 7,500 municipal connections and delivers approximately 8,000 AF annually to its customers (City of Norco 2016). There is a 16-inch main water line running east-west along Third Street adjacent to the project site (City of Norco 2014).

The City is active in regional strategies related to water supply and groundwater management with Western, CDA, City of Corona, Jurupa Community Services District (JCSD), and the Chino Basin

Figure 4.14-1 Groundwater Basins



Imagery provided by Esri and its licensors © 2020.
Additional data provided by Riverside County, 2020 and California Department of Water Resources, 2020

Watermaster (City of Norco 2016). Table 4.14-1 summarizes the City's current and projected water supplies.

Table 4.14-1 Norco Water Supplies – Current and Projected

Water Supplies (AF)	2015[1]	2020	2025	2030	2035	2040
Potable						
City-Extracted Groundwater – Chino Basin and Temescal Basin[2]	2,126	3,000	3,200	3,200	3,200	3,200
Purchased or Imported Water[3]	5,012	6,000	6,000	6,000	6,000	6,000
Recycled Water (Western Riverside County Regional Wastewater Authority Plant)[4]	0	1,825	1,825	1,825	1,825	1,825
Supply Total	**7,138**	**11,025**	**11,025**	**11,025**	**11,025**	**11,025**

[1]Actual supplies in 2015.

[2]The City has historically extracted groundwater from the Temescal Basin only but may shift a portion of its local groundwater production/extraction from the Temescal groundwater basin to the Chino groundwater basin.

[3]Purchased water sources include the Arlington Desalter and the Chino Desalter Authority. Imported water is sourced from the Western Municipal Water District. In 2015, 3,871.5 AF was purchased from the Arlington Desalter, 1,040.4 AF was purchased from the Chino Desalter Authority, and 100.1 AF from imported water supplies.

[4]Recycled water is not yet a permitted use from the Western Riverside County Regional Wastewater Authority (WRCRWA) plant and the City is using a non-portable well as a source of water for the existing recycled water program. The City is in the process of preparing a recycled water master plan and market assessment to determine future recycled water demands and identify additional areas of the City that may benefit economically from recycled water service and will transition some existing potable water demands to recycled water. The City is entitled to approximately 2.7 million gallons per day (MGD) of treated recycled water from the WRCRWA wastewater treatment facility for recycled purposes. Recycled water supply is anticipated to be available as early as 2020.

AF = acre feet

Source: City of Norco 2016

b. Water Demand

Since 1999, the City's local groundwater has accounted for approximately 38 percent of the overall demands with purchased water accounting for the remaining 62 percent of the overall demand. The production numbers vary from year to year depending upon weather conditions and local groundwater quality. Future demand projections assume approximately the same percentage between groundwater and purchased water supplies, as the City has expressed this ratio as a planning goal. This will be supplemented through future recycled water sources. The City of Norco 2015 UWMP projects future water demand through 2040.

The projected potable water usage is anticipated to decrease as a result of program implemented to meet mandatory reduction in per capita water use by 2020 and the transition of some existing potable water demands to recycled water. While projected potable water demands are calculated to decrease, customer accounts are projected to continue increasing at a normal rate along with population growth despite the decrease in demand. It is important to note that this assumption implies that future water consumption will be due to a decrease in usage per account, rather than a system wide reduction of total accounts. The anticipated drinking water quantities are projected to remain relatively consistent as future demands increase slightly through the planning horizon of 2040.

Historically, most of the water demand in the City has been primarily for residential land uses, with commercial, industrial, and institutional uses comprising approximately 32 percent of total usage between 2010 and 2015. As of 2015, the City currently maintains approximately 7,500 water meters (City of Norco 2016). Table 4.14-2 shows the City's projected demands by sector.

Table 4.14-2 The City's Projected Demands for Potable and Raw Water

Use Type	2020	2025	2030	2035	2040
Single Family	4,200	4,500	4,700	4,800	5,000
Multi-Family	83	85	87	89	91
Commercial	925	935	945	955	965
Landscape	900	800	700	600	500
Institutional/Governmental	700	650	550	450	400
Demand Total	**6,808**	**6,970**	**6,982**	**6,894**	**6,956**
Distribution System Losses[1]	374	383	384	379	383
Demand Total with System Losses	**7,182**	**7,353**	**7,366**	**7,273**	**7,339**

Units in acre feet (AF)

[1]Distribution system losses are equal to 5.5 percent of annual demand (average of five and six percent).

Source: Adapted from Table 4-2, City of Norco 2016

Dry Year Projections

The City of Norco estimates future water supply availability under single- and multiple-dry year scenarios. The City must demonstrate that sufficient water supplies be available to meet the next 25 years of projected water demands. During normal water years, no curtailments or other reductions in supply are expected for any of the City's supplies. During single-dry water years, there may be up to a 50 percent curtailment in the City's surface water supplied by Western. No reductions are assumed for the City's purchased water, groundwater, or recycled water supplies. Because the City's surface water supply is the only supply that is considered to be susceptible to dry water years, and because the City only relies on surface water in emergency situations, a reduction of 100 percent would not affect multiple dry-year demands. The City supplies available during single-dry water years are assumed to be no different than supplies available during normal water years.

Table 4.14-3 summarizes Norco's normal and single-dry year supply and demand through 2040. Under all scenarios for all years, demand remains below anticipated supply.

Table 4.14-3 Supply and Demand in Normal and Single-Dry Years

Year-Type	2020	2025	2030	2035	2040
Single-Dry Year Supply	10,825	11,025	11,025	11,025	11,025
Single-Dry Year Demand	7,008	7,170	7,182	7,194	7,150
Excess Supply	3,817	3,855	3,843	3,831	3,875

Units in acre feet per year (AFY)

Source: Adapted from Table 7-3, City of Norco 2016

Table 4.14-4 summarizes Norco's multiple-dry year supply and demand through 2040. Under all scenarios for all years, demand remains below anticipated supply.

Table 4.14-4 Supply and Demand in Multiple-Dry Years

Year-Type	2020	2025	2030	2035	2040
First Dry Year					
First Dry Year Supply	10,828	11,025	11,025	11,025	11,025
First Dry Year Demand	7,008	7,170	7,182	7,194	7,150
Excess Supply	3,820	3,855	3,843	3,831	3,875
Second Dry Year					
Second Dry Year Supply	10,828	11,025	11,025	11,025	11,025
Second Dry Year Demand	7,008	7,170	7,182	7,194	7,150
Excess Supply	3,820	3,855	3,843	3,831	3,875
Third Dry Year					
Third Dry Year Supply	10,828	11,025	11,025	11,025	11,025
Third Dry Year Demand	7,008	7,170	7,182	7,194	7,150
Excess Supply	3,820	3,855	3,843	3,831	3,875
Fourth Dry Year					
Fourth Dry Year Supply	10,828	11,025	11,025	11,025	11,025
Fourth Dry Year Demand	7,008	7,170	7,182	7,194	7,150
Excess Supply	3,820	3,855	3,843	3,831	3,875
Fifth Dry Year					
Fifth Dry Year Supply	10,828	11,025	11,025	11,025	11,025
Fifth Dry Year Demand	7,008	7,170	7,182	7,194	7,150
Excess Supply	3,820	3,855	3,843	3,831	3,875
Sixth Dry Year					
Sixth Dry Year Supply	10,828	11,025	11,025	11,025	11,025
Sixth Dry Year Demand	7,008	7,170	7,182	7,194	7,150
Excess Supply	3,820	3,855	3,843	3,831	3,875

Units in acre feet per year (AFY)
Source: Adapted from Table 7-4, City of Norco 2016

c. Wastewater

The City of Norco Public Works Department and WRCRWA provide sewer system services to the City. Norco provides sewer service in its service area via a collection system consisting of over 106 miles of collection pipelines and 11 left stations (City of Norco 2016). The City is a member agency of the WRCRWA which owns and operates a wastewater conveyance, tertiary treatment, and disposal system. The City also owns 100,000 gallons per day (gpd) of sanitary sewer collection and wastewater treatment capacity in the City of Corona system. The City has historically discharged

a waste stream of approximately 1.9 million gallons per day (MGD) to the WRCRWA for treatment (City of Norco 2016).

An existing 8-inch sewer main along Third Street and an existing 8-inch sewer main along Hamner Avenue conveys flows from the project site vicinity toward the WRCRWA plant, located approximately 2.5 miles northwest (Appendix I). The WRCRWA plant was originally constructed in 1998 and recently completed an expansion to nearly double treatment capacity to 14 MGD. The facility treats influent to tertiary standards, meeting all Title 22 requirements for recycled water. Currently, treatment plant effluent is discharged to the Santa Ana River (WRCRWA n.d.; City of Norco 2016). According to the 2018-2022 Countywide Water and Wastewater Municipal Services Review by the Riverside Local Agency Formation Commission (RLAFC), both the City's water and sewer infrastructure systems are aging, but no immediate or long-term capacity issues were identified (RLAFC 2018).

d. Stormwater Drainage Facilities

Currently, stormwater on the project site flows from higher elevations in the middle section of the project site approximately 640 feet above mean sea level (amsl) to lower elevations in the outer edges of the project site, approximately 603 feet amsl at the lowest point on the eastern side towards Hamner Avenue, 626 feet amsl on the northern side near Third Street, 615 amsl on the western side of the project site, and 610 amsl on the southern side (Appendix I).

The project site currently drains partly to the north into Third Street, to the east into Hamner Avenue, and dominantly toward south into the existing concrete lined North Norco Channel, a 40-foot wide concrete lined trapezoidal drainage channel running southwesterly direction along the project southwesterly boundary which ultimately drain into Santa Ana River near Corona Municipal airport. The site also receives runoff from northwesterly land of approximately 4.4 acres and sheet flows southeasterly into the North Norco Channel. The drainage from Third Street and Hamner Avenue ultimately drain into the North Norco Channel (Appendix I). Storm water runoff does not drain towards the project site from the adjacent properties due to existing streets and improvements (Appendix G). Stormwater conveyance facilities in Norco are maintained by Norco and Riverside County Flood Control and Water Conservation District (RCFCWCD).

e. Solid Waste Facilities

Waste hauling services in Norco are provided by Waste Management of the Inland Empire (City of Norco n.d.). No landfills are located in Norco; instead, municipal solid waste is disposed of at the El Sobrante Landfill near Corona, approximately 10.5 miles southeast from the project site. El Sobrante Landfill is privately-owned and operated by USA Waste Services of California, Inc. and accepts construction/demolition, contaminated soil, mixed municipal, and tire waste (California Department of Resources and Recycling and Recovery [CalRecycle] 2019a). Additional landfills in western Riverside County that may receive waste generated in Norco include the Badlands Sanitary Landfill near Moreno Valley, approximately 25 miles east from the project site, and the Lamb Canyon Sanitary Landfill near Beaumont, approximately 33 miles east from the project site. Badlands Sanitary Landfill and Lamb Canyon Sanitary Landfill are both owned and operated by the Riverside County Department of Waste Resources. Both landfills accept agricultural, asbestos, ash, construction/demolition, contaminated soil, green materials, industrial, liquid waste, metals, mixed municipal, sludge (biosolids), tires, and wood wastes (CalRecycle 2019b and 2019c).

f. Electricity and Natural Gas Providers

In 2018, California used 285,488 gigawatt-hours (GWh) of electricity, of which approximately 31 percent were from renewable resources (California Energy Commission [CEC] 2019a, 2019b). California also consumed approximately 12,600 million U.S. therms (MMthm) of natural gas in 2018 (CEC 2019c).

As discussed in Section 4.5, *Energy*, Southern California Edison (SCE) provides electricity to Norco, including the project site. SCE maintains substations and distribution lines in the region, including the Mira Loma substation approximately 5.7 miles north of the project site in Ontario and the Archibald substation approximately 11 miles northwest of the project site in Chino. SCE is currently constructing the Circle City substation and Mira Loma-Jefferson Sub-transmission Project in the City of Corona approximately 3.5 miles southeast from the project site, to meet increased demand for electricity in this region (SCE 2020). SCE overhead transmission lines are located within the project site along Hamner Avenue.

Starting in April 2020, Norco residents will be given a choice in the energy supply they receive through Western Community Energy (WCE). WCE is a joint powers authority, consisting of the cities of Norco, Canyon Lake, Eastvale, Hemet, Jurupa Valley, Perris, and Wildomar, and was formed in 2018 for the purpose of developing a Community Choice Aggregation (CCA) Program that will purchase energy on behalf of residents and businesses. Electricity will be distributed through SCE's transmission lines and hook ups.

Southern California Gas Company (SoCalGas) provides natural gas service to approximately six million residential and business customers across 20,000 square miles of southern California, including Norco (SoCalGas 2019). The project site is located in SoCalGas's Southern Zone. An existing natural gas transmission line owned and operated by SoCalGas runs provides service to Norco, including the project site. The transmission line runs northwest along River Street, where it joins with a high-pressure natural gas distribution line runs east along Bluff Street and Vine Street and concludes at Fifth Street at Hamner Avenue, approximately 1.05 miles north of the project site's northeastern boundary (SoCalGas 2016). For additional information on electricity and natural gas service and consumption, refer to Section 4.5, *Energy*.

g. Telecommunications

Numerous private local, wireless, and cellular phone service providers serve the Norco area and the project site; though Spectrum (a Charter Cable company) is the primary telecommunications service provider (City of Norco n.d.). Telecommunications lines are collocated along existing SCE electrical transmission lines along Hamner Avenue.

4.14.2 Regulatory Setting

a. Water Regulatory Setting

This regulatory setting discussion is specific to the assessment of water supply availability and reliability. Regulations and policies pertaining to water quality and potable drinking water standards are also discussed in Section 4.9, *Hydrology and Water Quality*.

Federal

Clean Water Act

The federal Clean Water Act (CWA), enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The CWA established the basic structure for regulating discharges of pollutants into the waters of the United States. The CWA gave the U.S. Environmental Protection Agency (USEPA) the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the CWA is administered by the USEPA and USACE. At the State and regional levels in California, the act is administered and enforced by the SWRCB and the nine Regional Water Quality Control Boards (RWQCBs).

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) regulates public water systems that supply drinking water (42 USC Section 300(f) et seq.; 40 CFR Section 141 et seq). The principle objective of the federal SDWA is to ensure that water from the tap is potable (safe and satisfactory for drinking, cooking, and hygiene). The main components of the federal SDWA are to:

- Ensure that water from the tap is potable
- Prevent contamination of groundwater aquifers that are the main source of drinking water for a community
- Regulate the discharge of wastes into underground injection wells pursuant to the Underground Injection Control program (see 40 CFR Section 144)
- Regulate distribution systems

State

Senate Bill 610

Senate Bill 610 (SB 610) amended the California Water Code to require detailed analysis of water supply availability for certain types of development projects. The primary purpose of SB 610 is to improve the linkage between water and land use planning by encouraging greater communication between water providers and local planning agencies and ensuring that land use decisions for certain large development projects are fully informed as to whether sufficient water supplies are available to meet project demands. SB 610 requires the preparation of a Water Supply Assessment (WSA) for certain large development projects unless there is an UWMP that accounts for the demand associated with the project.

Thresholds requiring the preparation of a WSA include residential developments of more than 500 dwelling units; shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space; commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space; industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of

floor area; and projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The project entails construction of 320 residential dwelling units, employment of fewer than 1,000 employees at the proposed 8,700 sf food garden, and construction of approximately 70,000 sf for the proposed hotel. Therefore, the project does not meet the requirements of preparing a WSA.

California Safe Drinking Water Act

The California SDWA (Health & Safety Code Section 116270 et seq.; CCR Title 22 Section 64400 et seq.) regulates drinking water more rigorously than the federal law. Like the federal SDWA, California requires that primary and secondary maximum contaminant levels (MCLs) be established for pollutants in drinking water; however, some California MCLs are more protective of health. The act also requires the SWRCB to issue domestic water supply permits to public water systems.

Implementation of the federal SDWA is delegated to California, and the SWRCB enforces the federal and State SDWAs and regulates more than 7,500 public water systems. The SWRCB's Division of Drinking Water oversees the State's comprehensive Drinking Water Program (DWP). The DWP is authorized to issue public water system permits.

Sustainable Groundwater Management Act

In September 2014, the governor signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act (SGMA) gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans (GSPs) to be developed for medium- and high-priority groundwater basins, as defined by the Department of Water Resources (DWR).

The project site overlies the Temescal Subbasin, which is classified as a medium-priority basin. The City of Corona, City of Norco, and Home Gardens County Water District have entered a Memorandum of Understanding (MOU) to establish the Temescal Subbasin Groundwater Sustainability Agency (Temescal GSA). Through the MOU, the City of Corona has accepted the primary responsibility to develop a GSP for the Temescal Subbasin. Corona will lead the preparation of a GSP for the subbasin that will include outreach to stakeholders, creation of data management system for GIS mapping and other relevant data sets (e.g., soils, land use, climate), water resources monitoring program preparation (e.g., groundwater levels, pumping, quality), groundwater analyses and maps of historical/current conditions (e.g., change in groundwater storage), groundwater quality assessment, groundwater budget assessment and quantification, numerical groundwater flow model review, possible improvement, and application, and consideration of management issues, objectives, and activities consistent with SGMA (DWR 2018).

California Plumbing Code

The California Plumbing Code is codified in CCR Title 24, Part 5. The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures (SB 407 [2009] Civil Code Sections 1101.1 et seq.).

The Water Conservation Act of 2009 (Senate Bill X7-7)

California adopted Senate Bill (SB) X7-7, or the Water Conservation Act of 2009, in November 2009. The legislation requires urban water retailers to set urban water use targets to achieve a 20 percent reduction in per capita urban water use by December 31, 2020. Additionally, the law requires agricultural water suppliers to prepare, adopt, and regularly update agricultural water management plans. Agricultural and urban water providers are ineligible for certain State grants and loans if they do not adhere to water conservation requirements outlined in the law.

Regional Water Management Planning Act

Adopted by the State legislature in 2002, the Regional Water Management Planning Act, or SB 1672, authorizes preparation of integrated regional water management plans. Such plans are developed by regional water management groups, defined as three or more local public agencies, at least two of which have statutory authority over water supply. Integrated regional water management plans address qualified programs and projects relating to water supply, water quality, flood protection, or other water-related topics undertaken by the participating public agencies. Qualified projects, as detailed in the legislation, include but are not limited to groundwater, urban, and agricultural water management planning efforts, levee or flood control infrastructure maintenance or construction, water recycling projects, and water conservation programs.

Local

Updated Integrated Regional Water Management Plan Report

Western Municipal Water District (WMWD) published the Updated Integrated Regional Water Management Plan Report (IRWMP) in May 2008 and includes the City of Norco as a designated stakeholder. While the IRWMP focuses on long-range water planning needs in WMWD's service area, the document includes a regional-scale assessment of water planning efforts, infrastructure, and pending studies and projects. The IRWMP also discusses regional water management efforts in the context of other applicable water and environmental regional plans, such as the Santa Ana Watershed Project Authority's One Water-One Watershed Program and the Multi-Species Habitat Conservation Plan (WMWD 2008).

City of Norco 2015 Urban Water Management Plan

The California Water Code, Division 6, Part 2.6, Section 10610 et. seq. (California Urban Water Management Planning Act) requires any municipal water supplier serving over 3,000 connections or 3,000 AFY to prepare a UWMP. The City of Norco 2015 UWMP characterizes historical water supplies and use, projects future demand and supply through 2040, and identifies supply augmentation projects and programs, cumulative water demand projections, and water shortage contingency plans. Supply and demand projections are included for normal, single-dry, and multiple-dry year scenarios (City of Norco 2016).

City of Norco Emergency Water Conservation Program

The City of Norco Emergency Water Conservation Program is codified in the City of Norco Municipal Code Section 14.04.220.

The Emergency Water Conservation Program establishes a five-level water shortage contingency plan, under which the Norco City Council may require increasingly stringent water conservation

measures depending on the severity of the water shortage applicable to all customers, water users, and premises served by the Water Utility. Each level of water shortage is accompanied by a reduction target and conservation measures, as follows:

- **Level 1—Water Shortage Watch.** Use restrictions are voluntary with a conservation target of 10 percent. The City shall increase its public education and outreach efforts to enhance awareness of the need to implement water conservation practices on residential and commercial properties.
- **Level 2—Water Shortage Caution.** Use restrictions are mandatory with a conservation target of up to 20 percent. Conditions of Level 1 apply, and the City shall limit all ornamental and turf irrigation to four days per week for no more than 10 minutes per station per day.
- **Level 3—Water Shortage Alert.** The City Council mandates all water users to reduce their water use more than 20 percent and up to 30 percent. Conditions of Levels 1 and 2 apply, and the City shall limit all ornamental and turf irrigation to three days per week for no more than 10 minutes per station per day. Potable water may not be used for construction purposes. Non-potable and/or recycled water must be utilized.
- **Level 4 —Water Shortage Critical.** The City Council mandates all water users reduce their water use more than 30 percent and up to 40 percent. Conditions of Levels 1, 2, and 3 apply, and the City shall limit all ornamental and turf irrigation to three days per week for no more than 10 minutes per station per day, with exceptions for fire management, livestock, public works projects that support public health and safety, or actively irrigated environmental mitigation projects. The City may establish a water allocation for property served.
- **Level 5 —Water Shortage Emergency.** The City Council mandates all water users reduce their water use more than 40 percent. Conditions of Levels 1, 2, 3, and 4 apply.

Upon the declaration of a water shortage response Level 4 or 5 water shortage critical condition, no new temporary construction meters shall be provided and no new potable water services or meters shall be provided, unless a valid, unexpired building permit has been issued for a portion of a project for which construction is in progress; the project is necessary to protect the public's health, safety, and welfare as determined by the City Council; or the applicant provides substantial evidence to of an enforceable commitment that water demands for the project will be offset by 125 percent prior to the provision of a new water meters.

City of Norco General Plan

The City of Norco General Plan Conservation Element provides the policy context for Norco to achieve its vision for preservation, development, and utilization of natural resources (City of Norco 2014). General Plan Conservation Element policies to protect water supply and water quality relevant to the project include the following:

Goal 2.2: Continuously maintain an adequate water supply that exceeds minimum state and federal water quality requirements.

- **Policy 2.2.1:** The City will continue to seek ways to increase the available water resources through the preservation of existing resources, and the development of new ones.
- **Policy 2.2.1a:** Continue to promote water conservation through the use of xeriscape designs in new development. Additionally, public spaces shall incorporate xeriscape landscaping where feasible.

- **Policy 2.2.1b:** Continue to provide information to the public on ways to conserve water and reduce consumption. Water conservation measures shall be specific to the type of user (i.e., residential, animal-keeping, and commercial).
- **Policy 2.2.1c:** The City, along with other member agencies of the Western Riverside County Regional Wastewater Authority, should monitor the demand for reclaimed water, and then file Petitions of Change with the Regional Water Quality Control Board on an as-needed basis to reduce the amount of reclaimed water that is discharged into the Santa Ana River from the Archibald Treatment Facility. That water could then be available for transmission into the City's reclaimed water infrastructure system already in place to deliver water for park irrigation and other future facilities. New projects (both public and private) should include as part of each project the installation of infrastructure for reclaimed water where the installation for future use is feasible.
- **Policy 2.2.1d:** Ensure that there are adequate increases in water production and distribution capabilities to meet future growth demands.
- **Policy 2.2.2:** Continue to monitor water quality and use the different available resources for water supply to ensure that the City has an uninterrupted supply of potable and aesthetic water.
- **Policy 2.2.2a:** Develop and maintain inter-agency agreements and infrastructure improvements to have back-up water supply sources from adjoining water districts during times of emergencies and system maintenance requirements.
- **Policy 2.2.3:** Continue regional cooperative agreements and actions for the protection of regional water resources.
- **Policy 2.2.3a:** Protect water resources from pollutants through enforcement of the Clean Water Act with the issuance of NPDES permits for new development, as applicable, including SWPPP during construction, and WQMP post construction.
- **Policy 2.2.3b:** Ensure through continuing public information campaigns that all residents with large animals are aware that manure spreading as a means of disposal is strictly prohibited to prevent contamination to ground water supplies, and that only temporary storage is allowed until collection by a City-approved waste hauler. In conjunction with Goal 2.6 (Development of Energy Resources) the City should seek financing opportunities for the development of a manure to energy processing facility now that the feasibility of such an operation for this area has been demonstrated.
- **Policy 2.2.3c:** The City, in cooperation with the Riverside County Department of Environmental Health, should vigorously enforce regulations regarding the dumping of commercial and industrial hazardous wastes to prevent contamination to groundwater supplies.
- **Policy 2.2.3d:** Continue partnering with the Regional Water Quality Control Board and neighboring water agencies for regional solutions to long range water quality issues.
- **Policy 2.2.3e:** Continue monitoring water quality and implement measures as needed to maintain the aesthetic quality of the water as well as the potability.

Goal 2.3: Preserve resources by reducing the demand for water in city facilities and in private domestic use.

- **Policy 2.3.2a:** Require the installation of flow restriction fixtures in all new development.

Goal 2.4: Maintain public awareness of water quality issues and individual responsibilities as residents.

General Plan Conservation Element policies to protect energy resources relevant to the project include the following:

Goal 2.5: Encourage the efficient use of energy resources.

- **Policy 2.5.1a:** Encourage new construction and project design that uses, or takes advantage of renewable energy resources, including but not limited to solar energy design.
- **Policy 2.5.1b:** Provide updated energy information documents for builders as needed to reflect the most recent Title 24 energy efficiency requirements and standards and other applicable new laws, requirements, and feasible building standards as may be available.
- **Policy 2.5.1c:** Update requirements and policies as necessary to reflect the most cost-effective advances in energy production and conservation.

City of Norco Water Resource Master Plan

The Water Resource Master Plan of the General Plan Conservation Element contains information regarding the conservation, utilization, and development of water resources and is based on the projections of the Water Facilities Master Plan, August 2001.

City of Norco Municipal Code

The following City of Norco Municipal Code sections would apply to the project:

- **6.42.270 Separation of Recyclable and Organic Materials, Storage, and Containers.** This section outlines the requirements for owners, operators, and/or occupants of any premises, business establishment, industry, or property for the safe and sanitary storage of, all solid waste, designated recyclables, organic materials, and compost accumulated on the property.
- **6.42.310 Construction and Demolition Debris Recycling.** This section specifies the requirements to submit a construction and demolition waste management report on a waste management report form approved by the City, that must meet the requirements of the City and California Green Building Standards Code.
- **13.08.010 Underground Utility Installation.** This section specifies the requirement that all facilities and wires for supplying and distributing electrical energy and service, including telephone, telegraph, and cable television service, to be constructed in the city shall be installed underground.
- **14.04.150 Water Utility Policy – New Development and Main Extensions.** This section outlines the requirements of new development to pay a water infrastructure facilities fee that is intended to provide funds for the construction of facilities to ensure a continuing supply of potable water including pump stations, water reservoir facilities, wells, treatment facilities and waterlines. Main extensions shall generally be located on dedicated City streets or on rights-of-way granted to the City of Norco or water main location.
- **14.07.160 Sewer Utility Policy – New Development and Main Extensions.** This section outlines the requirements of new development to pay a wastewater infrastructure facilities fee for the construction of facilities to ensure a continuing collection and treatment of wastewater including pipelines, manholes, lift stations, siphons, force mains and treatment facilities. It also outlines the provisions for extending the collection and transmission mains. Main extensions

shall generally be located within dedicated City streets or in rights-of-way granted to the City of Norco or sewer main location. Transmission collection mains shall be paid for jointly by the Sewer Utility and the developer extending the main.

- **15.08.020 Green Building Code Adoption.** This section requires that the rules, regulations, provisions and conditions set forth in the 2016 California Green Building Standards Code are adopted as the green building code of the City of Norco.
- **18.55.08 Xeriscape Requirements for Landscape and Irrigation Plans.** This section specifies the design guidelines for new development applications landscape and irrigation plans to demonstrate an aggregate reduction in the demand for and consumption of water.

b. Stormwater Drainage Regulatory Setting

Regulations and policies pertaining to stormwater drainage are discussed in Section 4.7, *Hydrology and Water Quality*.

c. Electric Power and Natural Gas Regulatory Setting

Regulations and policies pertaining to electric power and natural gas are discussed in Section 4.4, *Energy*.

d. Telecommunication Regulatory Setting

The California Public Utilities Commission develops and implements policies for the telecommunication industry. The Communications Division is responsible for licensing, registration and the processing tariffs of local exchange carriers, competitive local carriers, and non-dominant interexchange carriers. It is also responsible for registration of wireless service providers and franchising of video service providers. The Division tracks compliance with commission decisions and monitors consumer protection and service issues and Commission reliability standards for safe and adequate service (CPUC 2020).

4.14.3 Impact Analysis

a. Significance Thresholds

Appendix G of the CEQA Guidelines states utilities and service systems effects of the project would be significant if the project would:

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 of which could cause significant environmental effects;
2. Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
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
5. Not comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

b. Methodology

Stormwater infrastructure impacts were analyzed based on the project-specific Preliminary Hydrology Study (Appendix I) and the WQMP (Appendix J). Solid waste generation associated with the project was estimated based on anticipated site grading and preparation debris, soil export, and operational waste generation as reported in California Emissions Estimator Model (CalEEMod), Version 2016.3.2 (Appendix C). Project water demand and wastewater generation was estimated using CalEEMod as well (Appendix C), which calculates water demand and wastewater generation rates based on proposed land uses. CalEEMod calculates annual waste generation based on land use-based waste disposal rates reported by CalRecycle (CAPCOA 2017).

CalEEMod does not incorporate water use reductions achieved by 2016 CALGreen (Part 11 of Title 24). New development would be subject to CALGreen, which requires a 20 percent increase in indoor water use efficiency. In order to account for compliance with CALGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations for new development and as a project design feature under the mitigation tab in CalEEMod (Appendix C).

The indoor water use reduction achieved by 2016 CALGreen requirements was included in CalEEMod as "mitigation" for the project's indoor water use, which is a term of art for the modeling input and is not equivalent to mitigation measures that may apply to the CEQA impact analysis. Telecommunications infrastructure impacts were evaluated based on the proposed utilities site plan (Appendix B). Other publicly available resources consulted as part of this analysis include the City of Norco General Plan and the City of Norco 2015 UWMP.

c. Project Impacts and Mitigation Measures

Threshold 1:	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact U-1 **THE PROJECT WOULD RESULT IN THE RELOCATION OF UTILITIES SYSTEMS AND FACILITIES, CONSTRUCTION OF NEW OR EXPANDED WATER AND WASTEWATER TREATMENT, AND STORMWATER DRAINAGE FACILITIES ON THE PROJECT SITE TO ACCOMMODATE PROPOSED USES. PROPOSED UTILITIES AND SERVICE SYSTEM CONNECTIONS ON SITE WOULD BE COMPATIBLE WITH EXISTING INFRASTRUCTURE. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Water

According to the project's utility site plan (Appendix B), the project site vicinity is served by existing City of Norco potable water facilities, which includes a 16-inch domestic water main within the Third Street right-of-way immediately north of the project site and one 10-inch domestic water line within the Hamner Avenue right-of-way immediately east of the project site. Existing water hydrants are located along Third Street and Hamner Avenue. The project would include installation of two fire water service lateral connections extending from the Third Street main line and one fire water service lateral connection from Hamner Avenue to connect with approximately eight proposed new fire hydrants in the project site interior (two near the food garden, one near the hotel, and five near the residences). Two proposed domestic water service lateral connections would extend from the Third Street water main and one proposed domestic water service lateral connection would extend from the Hamner Avenue water main.

The proposed laterals, domestic and fire water lines, and hydrants would be installed on the project site during construction; therefore, the construction of these infrastructure improvements would not substantially increase the project's disturbance area, associated emissions, or otherwise cause significant environmental effects beyond those identified in Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas*, and this section. As described in Impact U-2, below, the project would be served by existing and planned utilities systems, which are not anticipated to require major treatment or distribution facility improvements. Therefore, project impacts with respect to new or expanded water facilities would be less than significant.

Wastewater Treatment

The project site vicinity is served by an existing Norco sanitary sewer main within the Third Street and Hamner Avenue right-of-way, which convey wastewater to the WRCRWA plant approximately 2.5 miles northwest from the project site. Two proposed sewer line extensions would connect the project to the existing 8-inch sanitary sewer main line within the Hamner Avenue right-of-way. As these extensions would be constructed as part of the project, construction of these wastewater treatment facilities would not result in potentially significant environment impacts beyond those identified throughout this document.

The project would result in an increase in wastewater generation relative to existing site conditions. Wastewater generated at the project site would be treated at the WRCRWA plant. The residential, and commercial land uses are assumed to generate approximately 67,842 gpd, or approximately 24.76 million gallons per year of wastewater for planning purposes, as shown in Table 4.14-5.

Table 4.14-5 Estimated Project Wastewater Generation

Land Use Type[1]	Number of Units or Acres	GPD Per Unit or Acre[2]	Projected Wastewater Generation (MGD)
Apartments Mid-Rise	320 units	200 gpd/unit	0.064
Food Garden	0.2	1,700 gpd/acre	0.0006
Health Club/Lounge/Leasing Office	0.29	1,700 gpd/acre	0.0005
Hotel	1.77	1,700 gpd/acre	0.003
Total			**0.07**

GPD = gallons per day, MGD = million gallons per day

[1] Wastewater generation rates are based on units for residential uses and acres for commercial uses.

[2] Food garden, hotel, and health club are categorized as commercial uses.

Sources: Rincon Consultants, Inc. 2020 (Appendix C); WMWD 2014

Table 4.14-6 summarizes the available capacity at the WRCRWA plant and the percentage used by anticipated project wastewater generation.

Table 4.14-6 Wastewater Treatment Plant Capacity

	WRCRWA Plant
Average Inflow	8.6 MGD[1]
Capacity	14 MGD
Available Capacity	5.4 MGD
Project Wastewater Generation[2]	0.07 MGD
Percent of Available Capacity Used by Project	1.3%

MGD = million gallons per day

[1] Based on current volume treated from all sources, as reported in WRCRWA Fiscal Year 2019-2020 Approved Budget (WRCRWA 2019)

[2] Based on mitigated wastewater generation rates contained in Table 4.14-5

Sources: WRCRWA n.d., WRCRWA 2019

As shown in Table 4.14-6, wastewater treatment facilities serving the project have sufficient capacity to process additional wastewater generated by the project. The project would be responsible for constructing wastewater treatment conveyance systems on the project site and paying standard sewer connection fees. Consequently, project impacts with respect to wastewater treatment facilities would be less than significant.

Stormwater Drainage

The existing project site is approximately 19.1 acres of mostly pervious surface area, except for the existing RV sales lot located in the northeast corner of the site. Implementation of the project would increase impervious surface on the project site due to construction of the proposed residential buildings, food garden and outdoor recreational amenities, and hotel. Consequently, the project would reduce infiltration potential and increase surface runoff on the project site. According to the Preliminary Hydrology Study (Appendix I), post-development conditions would generally preserve existing drainage patterns, with most of the drainage flowing to the south/southeast toward the North Norco Channel.

The project would involve construction of a storm drain system. Four underground detention basins would detain the difference in runoff hydrograph volume between the “developed” condition and the “pre-developed” condition for the 24-hour duration event for the 10-year return frequency, per RCFCWCD requirements. Proposed detention basins would be located at different use areas on the project site (residential complex, food garden, and hotel). The total volume of these detention basins would equal to or be greater than 164,793 cubic feet (cf) and each basin would store the prorated volume based on the site area and its respective imperviousness. The detention basin in the residential complex would have two underground detention system: one roughly in the center of the project site which would detain 40,592 cf, and one at the southeastern corner of the project site which would detain 54,710 cf; the food garden area (in the northeastern portion of the project site) would detain 46,658 cf; and the detention basin in hotel area (in the southeastern portion of the project site) would detain 22,833 cf. A map of these detention basins is shown in Appendix 8 of the Preliminary Hydrology Study (Appendix I).

Other existing pipes would convey drainage from the proposed catch basins into the proposed underground detention basins, which would be sized to able to convey 25-year storm event. The underground basins would connect to a proposed 24-inch and a proposed 36-inch storm drain located at the southern boundary of the project site that would flow directly into the North Norco

Channel. Stormwater on the eastern portion of the site would collect at an existing sump catch basin located at Hamner Avenue.

Water from a 100-year storm event would bypass these underground basins and flow into the existing North Norco Channel. Several drop inlet catch basins would be strategically placed at sump locations along the drive aisle and other locations to capture the runoff for the site. Catch basins would be designed and sized to capture 100-year storm with minimum ponding (Appendix I). After implementation of this proposed drainage system, upgrades to off-site drainage facilities are not anticipated.

An underground storm drain system at the western boundary of the project site has been proposed to capture run-on stormwater from the adjacent Norco College STEM Center property. This system would connect to a pass-by storm drain system that would drain directly into the existing North Norco Channel, as shown in Appendix B and Appendix I. This storm drain line would be sufficiently sized to carry 100-year storm event (Appendix I).

As with water and wastewater facilities, proposed storm drain infrastructure would be constructed within the disturbance area of the project and would not result in substantial additional environmental impacts. Given that the project would capture and retain stormwater runoff from 100-year storm events, off-site improvements to the storm drain network would not be necessary. Therefore, project impacts related to new or expanded stormwater facilities would be less than significant.

Section 4.9, *Hydrology and Water Quality*, contains additional discussion of the project's drainage and stormwater impacts.

Electric Power and Natural Gas

The project site and vicinity are currently served by existing natural gas and electricity systems. Aboveground electricity and telecommunications lines exist along the eastern boundary of the project site on Hamner Avenue. Substantial ground disturbance, grading, or use of heavy equipment beyond that necessary for utility connections and improvements would not be anticipated to implement natural gas and electricity connections to existing systems.

As discussed in Section 4.5, *Energy*, the proposed project uses would increase electricity and natural gas demand during project operations. However, such increased demand would account for a small fraction of SCE's and SoCalGas' total electricity and natural gas demand in the region. The nominal increase in energy demand would not require additional electricity substations or natural gas storage/transmission facilities beyond those currently serving the project site and Norco area. Therefore, project impacts with respect to new or expanded electric power or natural gas facilities would be less than significant.

Section 4.5, *Energy*, contains additional discussion of the project's electricity and natural gas demand.

Telecommunications

Telecommunications lines are collocated with SCE transmission lines along Hamner Avenue. Substantial ground disturbance, grading, or use of heavy equipment beyond that necessary for the proposed roadway improvements would not be anticipated to implement telecommunications connections to existing systems. No additional telecommunications improvements are proposed as

part of the project. Therefore, project impacts with respect to telecommunications systems would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact U-2 THE PROJECT WOULD DEMAND APPROXIMATELY 137.3 AF OF WATER PER YEAR, WHICH WOULD REPRESENT APPROXIMATELY 3.6 PERCENT OF NORCO'S PROJECTED EXCESS WATER SUPPLY FOR ALL NORMAL, SINGLE-DRY, AND MULTIPLE-DRY YEAR SCENARIOS THROUGH 2040. BASED ON NORCO'S WATER SUPPLY AND DEMAND PROJECTIONS, THERE IS ADEQUATE WATER SUPPLY AND CAPACITY TO MEET THE ADDITIONAL DEMANDS GENERATED BY TEMPORARY PROJECT CONSTRUCTION AND PROPOSED PROJECT USES. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction Demand

Water would be required for temporary construction activities on the project site, such as dust suppression, grading and grubbing, compaction, construction equipment wheel washing, and concrete mixing and casting. Water consumption by construction workers and cleaning of portable toilets on the project site may also account for a small portion of overall construction water demand.

Watering for dust suppression would demand the most water during construction. Pursuant to the requirements of South Coast Air Quality Management District Rule 403 as described in Section 4.2, *Air Quality*, all disturbed unpaved roads and disturbed areas within the project site would be watered approximately three times per day to reduce fugitive dust generation from construction activities. As discussed in the air quality analysis (Appendix C), the site preparation and grading phases would disturb the entire project site, which would be up to 19.1 acres per day. The site preparation and grading phases would last approximately 67 and 86 days, respectively. Water demand for dust suppression is highly dependent on several site-specific variables, including soil properties, antecedent moisture conditions, and other climatic factors. In other arid and semi-arid portions of southern California, water demand for construction dust control has been estimated at roughly 3,300 to 4,000 gallons per acre per day (County of San Diego 2013; Murphy 2015). Conservatively assuming an application rate of 4,000 gallons per acre per day for the entire project site, dust control for the entire duration of the site preparation and grading phases would require approximately 11.7 million gallons of water, or approximately 36 AF in total.

Construction water demand would be temporary and, therefore, would not result in a long-term strain on water supplies. As discussed above in Section 4.14.2, *Regulatory Setting*, Norco's five-level Water Shortage Contingency Plan allows the Norco City Council to declare drought emergencies. During a Level 3, Level 4, and Level 5 drought emergency, only non-potable and/or recycled water must be utilized for construction activities. Upon the declaration of a water shortage response

Level 4 or 5 water shortage critical condition, no new temporary construction meters shall be provided and no new potable water services or meters shall be provided unless a valid, unexpired building permit has been issued for a portion of a project for which construction is in progress; the project is necessary to protect the public's health, safety, and welfare as determined by the Norco City Council; or the applicant provides substantial evidence to of an enforceable commitment that water demands for the project will be offset by 125 percent prior to the provision of a new water meters.

Project construction water demand and use would be temporary. As stated above, Norco would be able to require non-potable or recycled water use for construction activities through a Level 3, Level 4, or Level 5 drought declaration if adequate water supplies were limited, and restrict water use for new construction during a Level 4, or Level 5 drought declaration. Therefore, project impacts related to construction water consumption would be less than significant.

Operational Demand

The project entails new development that would cover the entirety of the 19.1-acre project site. Table 4.14-7 summarizes the estimated water demand of proposed project uses based on the water use rates in CalEEMod (Appendix C).

Table 4.14-7 Estimated Project Water Demand

Land Use Type[1]	Projected Indoor Water Demand (MG/Year)[2]	Projected Outdoor Water Demand (MG/Year)[3]	Projected Total Water Demand (MG/Year)	Projected Total Water Demand (AFY)
Apartments Mid-Rise	16.7	13.1	29.8	91.5
City Park	0.0	8.8	8.8	27.0
Fast Food Restaurant without Drive Thru	2.1	0.2	2.3	7.1
Health Club	0.6	0.5	1.1	3.4
Hotel	2.4	0.3	2.7	8.3
Parking Lot	0.0	0.0	0.0	0.0
Total	**21.8**	**22.9**	**44.7**	**137.3**

MG = million gallons, AFY = acre-feet per year, sf = square feet

[1] Land Use Type in CalEEMod that most accurately depicts the proposed land uses in the project, as modeled for the project in the Air Quality and Greenhouse Gas Report (Appendix C).

[2,3] Projections are approximate and rounded to the nearest tenth. Totals may not add correctly due to rounding.

Source: Rincon Consultants, Inc. 2020 (Appendix C)

Project water use would consist of indoor and outdoor water use. Indoor water use would include that associated with building plumbing and industrial processes occurring in proposed facilities. The project would comply with all requirements of CALGreen, as adopted by City of Norco Municipal Code Section 15.08.020 as it pertains to maximum flow rates for plumbing fixtures, such as toilets, showerheads, and faucets in non-residential buildings. Proposed residences would also include individual unit water-use monitoring.

Outdoor water use would consist of landscape irrigation. As discussed in Section 2, *Project Description*, landscaping throughout the project site would consist of low water use trees, shrubs, and ground cover, as well as various planted accent pots (conceptual landscape plan included in Appendix B) The project's landscape plan would comply with City of Norco Municipal Code Section 18.55.08, which requires water conserving plants in 75 percent or more of the total landscaped area, drought-tolerant turf and grasses, a minimum 10 percent hardscape (non-irrigated) areas of total landscaped area, and permeable paving in at least five percent of total landscaped area. Landscaping would be maintained via a low flow irrigation system, and the use of reclaimed or recycled water would be utilized if feasible.

Water Supply

As discussed in Section 4.14.1, *Setting*, the City of Norco 2015 UWMP estimates water supply availability for normal, single-dry, and multiple-dry year scenarios from 2020 through 2040. For all years and all scenarios, projected supply exceeds anticipated demand. Table 4.14-8 summarizes supply, demand, and the project's anticipated share of excess supply for the normal and single-dry year scenarios. As discussed in Section 4.14.1, *Setting*, Norco anticipates no distinction between normal year and single-dry year scenarios. Anticipated project demand would account for approximately 3.6 percent of Norco's excess supply during normal and single-dry year scenarios.

Table 4.14-8 Project Share of Norco Normal and Single-Dry Year Supply and Demand

	2020	2025	2030	2035	2040
Supply (AFY)	10,825	11,025	11,025	11,025	11,025
Demand (AFY)	(7,008)	(7,170)	(7,182)	(7,194)	(7,150)
Excess Supply (AFY)[1]	3,817	3,855	3,843	3,831	3,875
Project Percent of Excess Supply (%)[2]	3.6	3.6	3.6	3.6	3.6

[1] Equal to total supply minus total demand.

[2] Assumes total project demand of 137.3 AFY, as estimated in based on demand factors provided in CalEEMod (Appendix C).

Source: City of Norco 2016

Table 4.14-9 summarizes supply, demand, and the project's anticipated share of excess supply for the multiple-dry year scenario. Anticipated project demand would account for approximately 3.6 percent of Norco's excess supply during multiple-dry year scenario.

Table 4.14-9 Project Share of Norco Multiple-Dry Year Supply and Demand

	2020	2025	2030	2035	2040
Supply (AFY)	10,828	11,025	11,025	11,025	11,025
Demand (AFY)	(7,008)	(7,170)	(7,182)	(7,194)	(7,150)
Excess Supply (AFY)[1]	3,820	3,855	3,843	3,831	3,875
Project Percent of Excess Supply (%)[2]	3.6	3.6	3.6	3.6	3.6

[1] Equal to total supply minus total demand.

[2] Assumes total project demand of 137.3 AFY, as estimated in based on demand factors provided in CalEEMod (Appendix C).

Source: City of Norco 2016

The project would account for approximately 3.6 of Norco's projected excess supply during all normal, single-dry, and multiple-dry year scenarios through 2040 as shown in Table 4.14-8 and Table 4.14-9. Based on the water demand projections, local water supplies are sufficient to serve the project during normal, single-dry, and multiple-dry years. Therefore, project impacts pertaining to operational water consumption would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3:	Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact U-3 PROJECT-GENERATED WASTEWATER WOULD BE TREATED AT THE WRCRWA PLANT, WHICH HAS ADEQUATE CAPACITY TO SERVE THE PROJECT'S PROJECTED WASTEWATER GENERATION IN ADDITION TO ITS EXISTING WASTEWATER TREATMENT COMMITMENTS. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed under Impact U-1, project-generated wastewater would be adequately served by available capacity at the WRCRWA plant. Wastewater generated by the project would account for less than two percent of the remaining available capacity at the plant, which was recently expanded to accommodate a maximum capacity of 14 MGD. The project would not result in a determination by the wastewater treatment provider that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 4:	Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
Threshold 5:	Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Impact U-4 SOLID WASTE GENERATED DURING PROJECT CONSTRUCTION AND OPERATION WOULD NOT EXCEED THE EXISTING PERMITTED DAILY THROUGHPUT AT THE EL SOBRANTE LANDFILL, WHICH HAS ADEQUATE CAPACITY. THE PROJECT WOULD COMPLY WITH FEDERAL, STATE, AND LOCAL STATUTES SUCH AS ASSEMBLY BILL (AB) 939 AND THE CITY'S SOLID WASTE COLLECTION AND DISPOSAL ORDINANCE. THEREFORE, PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As described in Section 4.14.1, *Setting*, Waste Management of the Inland Empire provides solid waste collection services to the Norco area and project site. Solid waste generated in Norco may be disposed of at various landfills throughout Riverside County based largely on proximity. However, waste is generally disposed of at the El Sobrante Landfill, which accepts construction/demolition debris, contaminated soil, mixed municipal, and tire waste (CalRecycle 2019a).

The El Sobrante Landfill is located approximately 14 miles southeast from the project site at 10910 Dawson Canyon Road in the City of Corona. According to the CalRecycle Solid Waste Information System, El Sobrante Landfill has a maximum permitted capacity of 209,910,000 cubic yards (cy) and a remaining capacity of approximately 143,977,170 cy as of April 2018. The landfill has a maximum permitted throughput of 16,054 tons per day and an anticipated closure date of 2051 (CalRecycle 2019a).

Construction

The project site is mostly vacant with exception to the existing RV sales lot located in the northeast corner of the site. The remainder of the project site contains remnants of foundations with evidence of previous grading and development but is mostly vegetated with a few scattered trees as described in Section 4.3, *Biological Resources*. The project would not entail substantial demolition since there are no major structures present on site. All construction waste material would be sent to a landfill that accepts construction debris, the closest of which is the El Sobrante Landfill.

As discussed in Section 4.8, *Hazards and Hazardous Materials*, the project site is not included on any federal or State databases for hazardous waste or contaminated sites and there was no visual evidence of other hazardous substances or wastes were not observed. Therefore, soil from the project site is not anticipated to be contaminated and would not require disposal at landfills that accept contaminated soil. Exported soil could be transported to other area landfills that accept soil and construction debris in nearby San Bernardino and Los Angeles counties to further reduce impacts at any single solid waste disposal facility. Disposal of soils from grading of the project site is not anticipated to exceed the capacity of local solid waste disposal facilities.

The handling of all debris and waste generated during construction of the project would be subject to 2016 CALGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. Furthermore, pursuant to City of Norco Municipal Code Section 6.42.310, the project would be required to submit a construction and demolition waste management report on a form approved by the City, which must meet the requirements of the City and CALGreen. Therefore, project impacts related to solid waste generated during construction would be less than significant.

Operation

According to CalEEMod (Appendix C), the project would generate approximately 292 tons of solid waste annually, or approximately 0.8 tons per day. The project's anticipated solid waste generation would account for less than one percent (0.005 percent) of El Sobrante Landfill's daily permitted throughput of 16,054 tons per day. Given this daily output of project-generated solid waste permitted and the existing surplus capacity at El Sobrante Landfill, the solid waste generated by project operation would be adequately accommodated by existing landfills.

The project would be required to comply with federal, State, and local statutes and regulations related to solid waste. For operational waste, AB 939 requires all cities and counties to divert a minimum of 50 percent of all solid waste from landfills. Additionally, the project would comply with the Solid Waste Collection and Disposal Ordinance, codified in City of Norco Municipal Code Chapter 16.05, which regulates waste storage, collection, transfer, and disposal. Therefore, project impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.14.4 Cumulative Impacts

Planned and pending projects in Norco and surrounding areas are listed in Table 3-1 in Section 3, *Environmental Setting*, and include residential, commercial, and industrial land uses.

Water

The geographic scope for cumulative water supply impacts is the City of Norco. This geographic scope is appropriate because the City is responsible for supplying potable water to all residential, commercial, industrial, and fire protection uses within its service area, which includes the project site. Of the cumulative projects listed in Table 3-1, 11 are located in the City of Norco. Proposed land uses for these 11 cumulative projects include commercial retail, restaurants and fast-food establishments, offices, an industrial park, warehouses, a stadium, gas stations, and hotels.

Cumulative development in the Norco service area would increase demands on water supplies. Norco anticipates a total normal year demand of 7,339 AFY by 2040, which would result in an increase of 157 AFY from the anticipated 2020 demands (City of Norco 2016). This anticipated increase in demand is based on planned and pending future development as identified on the existing and planned zoning and land use specifications in the General Plan Housing Element. Therefore, cumulative water demand associated with these 11 projects and the proposed project would be accounted for in the water supply demand projections in the City of Norco 2015 UWMP.

As discussed in Impact U-2 and shown in Table 4.14-3 and Table 4.14-4, the project would account for approximately 3.6 percent of Norco's excess water supply during all normal, single-dry, and multiple-dry year scenarios through 2040. This excess supply represents the supply available to Norco after fulfilling future demand associated with buildout of planned, pending, and reasonably foreseeable future projects in the Norco service area. Future projects would be required to obtain service commitments from Norco prior to construction, and those meeting the definition of a

project pursuant to SB 610 would be required to prepare a project-specific WSA. Therefore, cumulative impacts related to water would be less than significant.

Wastewater

The geographic scope for cumulative wastewater facilities impacts is the service area for the WRCRWA plant, which includes portions of the cities of Norco, Corona, and portions of the JCSD, Home Gardens Sanitary District, and WMWD service areas (WRCRWA n.d.). This geographic scope is appropriate because the WRCRWA plant would receive wastewater flows from the project and, consequently, the project would not contribute to capacity constraints at any other wastewater treatment facilities. Impacts would be cumulatively significant if cumulative development in the service area would exceed the capacity of the WRCRWA plant.

As discussed in Impact U-1, the WRCRWA currently treats approximately 8.6 MGD of wastewater and was recently expanded to treat up to 14 MGD, resulting in an excess capacity of approximately 5.4 MGD.

Planned, pending, and reasonably foreseeable development would increase demands on the existing wastewater treatment and conveyance facilities in the WRCRWA plant service area. However, the project would account for less than two percent of the remaining capacity at the WRCRWA. Future projects would be required to obtain commitments from the City of Norco to provide wastewater treatment services prior to construction on a project-by-project basis, which would be dependent on remaining treatment capacity at the WRCRWA plant. Therefore, cumulative impacts associated with wastewater services would be less than significant.

Stormwater

Cumulative impacts to stormwater/drainage facilities are discussed in Section 4.7, *Hydrology and Water Quality*. Individual projects would be subject to the stormwater capture and treatment requirements of the applicable MS4 Permit, reducing potential impacts to stormwater drainage facilities. Therefore, cumulative impacts to stormwater/drainage facilities would be less than significant.

Solid Waste

The geographic scope for cumulative solid waste impacts encompasses all areas in the region that contribute solid waste to the El Sobrante Landfill. This geographic scope is appropriate because, as discussed in Section 4.14.1, *Setting*, the El Sobrante Landfill would receive project-generated solid waste and, consequently, the project would not substantially contribute to capacity constraints at other solid waste disposal facilities.

Planned, pending, and reasonably foreseeable future development in the El Sobrante Landfill service area would result in increased solid waste generation. As discussed in Impact U-4, the El Sobrante Landfill is anticipated to reach its maximum permitted capacity in 2051 and has a maximum permitted daily throughput of 16,054 tons per day (CalRecycle 2019a). This equates to an annual maximum throughput of approximately 5,859,710 tons per year. Once operational, the project would account for approximately 0.005 percent of this annual throughput. In addition, compliance with applicable solid waste regulations would maintain or improve upon solid waste diversion rates. Other cities in the region are also subject to solid waste diversion requirements and implementation of waste diversion programs and policies in order to meet State-mandated solid waste diversion rates. For example, AB 939 requires cities to divert 50 percent of solid waste from

landfills. Cumulative projects would be required to comply with State and local waste diversion and/or reduction programs. Therefore, cumulative impacts to solid waste facilities would be less than significant.

Electric Power and Natural Gas Facilities

The geographic scope for cumulative electricity and natural gas impacts is the City of Norco, which is appropriate due to the service area of existing service providers, SCE and SoCalGas, respectively. Cumulative impacts with respect to electric power and natural gas facilities are discussed in Section 4.5, *Energy*. Cumulative development projects would be subject to applicable local, regional, State, and federal policies regarding energy efficiency, in turn reducing the need for new or expanded electrical and natural gas facilities. Cumulative impacts to electric power and natural gas facilities and systems would be assessed and addressed on a project-by-project basis due to the project site specific nature of existing facilities and proposed connections. Therefore, cumulative impacts pertaining to electric power and natural gas facilities would be less than significant.

Telecommunication

The geographic scope for cumulative telecommunications impacts is the City of Norco, which is appropriate due to the service area of existing service providers (mainly Spectrum, a Charter Cable company). As discussed above under Impact U-1, the project would include telecommunications connections to existing lines and systems, as service providers exist for the project site and vicinity. Infrastructure improvements would occur within the disturbance area of the project and would not result in significant environmental impacts. Cumulative development would increase demand for telecommunications infrastructure in Norco and surrounding region. Cumulative projects would each be required to provide adequate telecommunications infrastructure upgrades on a project-by-project basis and would be subject to the appropriate level of project-specific environmental review. As with the project, such upgrades would typically be expected to occur within the development footprints of other cumulative projects. Therefore, cumulative impacts related to telecommunications infrastructure would be less than significant.

5 Effects Found Not to be Significant

CEQA Guidelines Section 15128 requires an EIR to briefly describe any possible effects that were determined not to be significant and were therefore not discussed in detail. This section addresses the potential environmental effects of the project that were determined not to be significant. The topics listed below that were found not to be significantly affected by the project are drawn from the environmental checklist form included in Appendix G of the CEQA Guidelines. Any items not addressed in this section are included in Section 4, *Environmental Impact Analysis*, of this EIR.

5.1 Agriculture and Forestry

Appendix G of the CEQA Guidelines states the agricultural and forestry resource impacts of the project are considered significant if the project would:

a. *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;*
b. *Conflict with existing zoning for agricultural use or a Williamson Act contract;*
c. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));*
d. *Result in the loss of forest land or conversion of forest land to non-forest use;*
e. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.*

The project site is identified as *Urban and Built Up Land* and is not considered *Farmland of Local Importance* by the California Department of Conservation (2016). As stated in Section 2, *Project Description*, and Section 4.10, *Land Use and Planning*, the project site has a General Plan land use designation of Specific Plan (SP) in the Housing Development Overlay (HDO), and a zoning designation of Specific Plan (SP), specifically the Norco Auto Mall Specific Plan. The project site is located in Area A of the Norco Auto Mall Specific Plan, which has an underlying zone of commercial general (C-G).

The property is not under a Williamson Act contract. The proposed uses do not include agricultural or dairy operations on the project site. The project site is currently vacant, with exception of the RV sales lot, and there are no agricultural uses on site. As stated in Section 4.4, *Cultural Resources*, the entire project site is disturbed from past agricultural activities and subsequent development. As stated in Section 4.8, *Hazards and Hazardous Materials*, aerial photographs reviewed as part of the Phase I (Appendix H) showed that residential buildings and other structures were present on the project site from at least 1931 to around 1975. Therefore, implementation of the project would not result in the loss of agricultural land, and project impacts to agriculture would be less than significant.

The project site is not designated as forest land or timberland according to Public Resources Code (PRC) Sections 12220(g) or 4526, or Government Code Section 51104(g). The project site does not contain forest land; implementation of the project would not result in the loss of forest land or

conversion of forest land. Therefore, the project would not result in the loss or conversion of farmland, forest land, or timberland, and would not produce changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, no impacts associated with farmland, forest land, or timberland would occur due to the project.

5.2 Mineral Resources

Appendix G of the CEQA Guidelines states the mineral resource impacts of the project are considered significant if the project would:

a. *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;*
b. *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.*

There are no known mineral resources on the project site or in the immediate vicinity of the project site. Exhibit 3.7, *Mineral Resources*, in the General Plan Conservation Element shows that the project site is not located in an area of known mineral resources (City of Norco 2014). The project site has no history of use as a mineral resource recovery operation. Additionally, the City does not acknowledge the presence of significant aggregate or other mineral resources within the General Plan. The project would not result in the loss of availability of any locally important mineral resources or mineral resource recovery sites. Proposed uses do not entail mining operations. Therefore, the project would have no impact to mineral resources.

5.3 Population and Housing

Appendix G of the CEQA Guidelines states the population and housing impacts of the project are considered significant if the project would:

a. *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);*
b. *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.*

The project entails development of 320 multi-family residential units, an 8,700 sf food garden with outdoor recreational amenities, and a 120-room hotel. The project site is mostly vacant with a RV sales lot located in the northeast corner; there are no permanent structures or existing residences on the project site that would need to be demolished as part of the project. Therefore, the project would not necessitate construction of replacement housing elsewhere in the City.

The 2019 population of Norco was 26,386 (DOF 2019). The project would increase the City's population directly due to the proposed residences and indirectly due to new employment opportunities. The project would generate an estimated 915 residents, based on analysis completed in the project-specific Air Quality and GHG Emissions Study (Appendix C). According to the 2016 RTP/SCS, the City of Norco is projected to have a population of 32,100 residents by 2040 based on a 2012 population of 26,900 residents (SCAG 2016). The project would account for approximately

three percent of the City's projected 2040 population, or approximately 18 percent of the residential growth anticipated for the City between 2012 to 2040.

Additionally, the project site is identified as having high development potential in the General Plan Housing Element, which states that a portion of the City's 2014-2021 RHNA allocation may be placed on the project site. Development capacity for the site was assumed to be 50 percent residential for up to 184 dwelling units (City of Norco 2013a). As stated in Section 4.10, *Land Use and Planning*, the project would develop 320 residential units on 11.3 acres of the site, which would result in a project density of approximately 29 dwelling units per acre and compliant with the HDO. Therefore, direct and indirect population growth resulting from the project was planned for in regional and City plans. The project would have a less than significant impact.

Projected employment densities for various land uses vary widely, depending on the location and actual business activities. Table 4.2-6 in Section 4.2, *Air Quality*, shows the number of employees the project would likely employ based on the SCAG employment density study (SCAG 2001). The project would generate a need for 44 employees; it is anticipated that the existing local and regional workforce would adequately supply the needed employees for proposed uses.

According to the 2016 RTP/SCS, the City of Norco is projected to have 25,700 employees by 2040 based on a 2012 employee population of 13,200 (SCAG 2016). The project would account for approximately 0.2 percent of the City's projected 2040 employee population, or approximately 0.4 percent of the employee population growth anticipated for the City between 2012 to 2040. Therefore, the project would not provide employment opportunities beyond those anticipated in regional and City growth plans.

Direct and indirect project impacts to population growth, employment opportunities, and housing growth would be less than significant.

5.4 Recreation

Appendix G of the CEQA Guidelines states recreational facilities impacts of the project are considered significant if the project would:

a. *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;*
b. *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.*

As stated in Section 4.12, *Public Services*, the City contains 15 outdoor public parks and 1,791 acres of existing land use in Norco is designated public use and open space (excluding streets and freeways) (City of Norco 2009). Norco currently maintains a parkland-to-resident ratio of approximately 68 acres per 1,000 residents, which is higher than the average ratio for low-density cities of 24 acres per 1,000 residents (The Trust for Public Land 2017).

Parmenter Park (2760 Reservoir Drive) is located nearest to the project site, approximately one-mile northeast. Parmenter Park contains a lighted ball field suitable for softball, a tot lot, and an open grass area with picnic tables (City of Norco 2020). SilverLakes Equestrian and Sports Park (5555 Hamner Avenue) is one of the largest recreational facilities located in the City and region, located approximately 2.5 miles north from the project site. SilverLakes Park contains 24 soccer fields, five equestrian arenas, outdoor café, outdoor concert venue, and a sit-down restaurant (Balboa Management Group 2016).

As discussed above in Section 5.3, *Population and Housing*, the project would generate approximately 915 residents. According to Norco Municipal Code Section 3.40.038, the project applicant would be required to pay a parkland and open space acquisition fee which provides funds for the acquisition, improvement, and development of park and open space land and recreational facilities. The City is not in need of additional parkland, as it maintains a high parkland to population ratio, and would not need to acquire additional parkland in order to meet its goal of eight acres per 1,000 residents.

The project site is not currently identified as parkland or an anticipated addition to the open space network. The project includes recreational amenities with the proposed food garden that would be available to project and City residents and visitors. Proposed recreational amenities include an area for bocce and lawn games, a stage for live performances, an open space park, horse paddock, and an equestrian trail. These recreational amenities would be privately owned and operated and would not require additional maintenance efforts from the City.

As described in Section 2, *Project Description*, the equestrian trail would be located along the frontage of Third Street and most of Hamner Avenue, around the perimeter of the food garden, and along a portion of the southern boundary of the project site with a connection to an existing off-site equestrian trail on Mountain Avenue. The provision of a horse paddock and equestrian trail on the project site would enhance the City's equestrian lifestyle by encouraging the use of the existing Class I equestrian trail along Third Street to access the proposed food garden. The proximity of the project site to existing residential, commercial, and institutional uses would encourage active transportation use by future project residents as well as by Norco residents accessing the proposed food garden and recreational amenities.

Furthermore, project demand for park and recreation facilities would be offset by payment of proportionate development impact fees of $9,639 per unit for parks and $2,559 per unit for trails, as indicated in Table 4.12-3. These fees would cover future parkland, recreation facility construction, and/or expansion to accommodate cumulative increases in the City's population. Potential environmental impacts related to the construction of new or expanded facilities would be assessed on a project-specific level under CEQA.

The project itself would not trigger the need for additional City parks and recreational facilities; nor increase the demand on existing parkland and recreational facilities or require the expansion or construction of recreational facilities. Therefore, the project would have less than significant impact on parks and recreation facilities.

5.5 Wildfire

Appendix G of the CEQA Guidelines states the wildfire of the project are considered significant if the project would:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan;

b. 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;

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;

d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

According to the CAL FIRE Hazard Severity Zone Map for Western Riverside County and the Fire Hazards Map in the General Plan Safety Element, the project site is not located in or near a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2009; City of Norco 2013b). The project site is located approximately 1.3 miles west of the nearest VHFHSZ at the western base of Norco Hills. Areas of greatest wildfire potential are located on the eastern edge of the City and areas of moderate potential are located on the southeastern and northern areas of the City. According to the General Plan Safety Element, the greatest areas of wildfire threat are in undeveloped and open areas, particularly those with steep slopes and dry vegetation (City of Norco 2013b).

The project site is located in a relatively flat portion of the City surrounded by developed, urban landscape. Implementation of the project would fully develop the site with hardscape (i.e., buildings, paved walkways, compacted dirt for the proposed paddock and corral, driveways, and parking areas) and drought-tolerant landscaping. The project would include installation of on-site and off-site drainage facilities and would not result in wildfire risks or risks related to downslope or downstream flooding or landslides subsequent to wildfire events. The project would not include infrastructure that could exacerbate fire risks. Furthermore, proposed driveways, vehicle circulation areas, and parking areas are designed to accommodate emergency vehicle access and circulation. Final project review will be completed by the RCFD when complete building plans are submitted, to ensure the project incorporates all fire safety design and protection features.

The project would not substantially impair an adopted emergency response plan or emergency evacuation plan and would not impair abilities of emergency response services, including response to wildfire. Therefore, project impacts related to wildfire risks would be less than significant.

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6 Other CEQA Required Discussions

This section analyzes the potential irreversible environmental effects and growth-inducing impacts of the project. Energy impacts are addressed in Section 4.5, *Energy*.

6.1 Irreversible Environmental Effects

CEQA Guidelines Section 15126.2(c) requires EIRs to contain a discussion of significant irreversible environmental changes which may be caused by the project should it be implemented. This section addresses the use of non-renewable resources during initial and continued phases of the project, the commitment of future generations to environmental changes or impacts because of the project, and any irreversible damage from environmental accidents associated with the project.

6.1.1 Use of Non-Renewable Resources

The project proposes development of residential and commercial uses on a site that is mostly vacant and underutilized. Construction of the project would involve an irreversible commitment of construction materials and non-renewable energy resources. The project would involve the use of building materials and energy resources, some of which are non-renewable, to construct 320 multi-family residential units and amenities, 8,700 sf of food garden buildings and outdoor recreational amenities, 70,000 sf hotel with 120 rooms, and associated surface parking for the proposed residential and commercial uses. Consumption of these building materials and energy resources would occur with any development of the project site and are not unique to the project.

Operation of the project would irreversibly increase local demand for non-renewable energy resources, such as natural gas. Increasingly efficient building design, however, would offset this demand to some degree by reducing energy demands of the project. The project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (CCR Title 24, Part 11). The California Green Building Standards Code functions to:

- Reduce GHG emissions from buildings
- Promote environmentally responsible, cost-effective, healthy places to live and work
- Reduce energy and water consumption
- Respond to the environmental directives of the administration

The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. With adherence to these standards, the project would not use excessive amounts of energy or construction materials, and project impacts related to consumption of non-renewable and slowly renewable resources would be less than significant. Consumption of these resources would occur with any development of the project site and would not be unique to the proposed project. Section 4.5, *Energy*, includes a discussion of the potential energy consumption impacts of the project.

6.1.2 Commitment of Future Generations

Approval of the project would result in environmental changes or impacts that commit future generations to new environmental circumstances. Primarily, the approval of the project would result in the establishment of a multi-family residential community, a food garden with outdoor recreational amenities open to patronage by the Norco community, and a visitor-serving hotel; uses which are permitted for the project site under the existing General Plan land use and zoning designations, as discussed in Section 4.10, *Land Use and Planning*. The increase in residential population and employment opportunities that would result from the project have been accounted for in the General Plan 2014-2021 Housing Element and SCAG's 2016 RTP/SCS, as discussed in the following sections: Section 4.2, *Air Quality*; Section 4.10, *Land Use and Planning*; and Section 5.3, *Population and Housing*. Furthermore, the project is consistent with the development potential identified for the project site in the General Plan 2014-2021 Housing Element, and the development of 320 residential units would account for approximately 70 percent of the City's current RHNA allocation of 453 residential units.

The project would result in a permanent increase in traffic and vehicle trips on local roadways. Several intersections currently operate at unacceptable levels and would continue to do so with project traffic. Section 4.13, *Transportation*, concludes long-term traffic impacts associated with the project would be less than significant with implementation of Mitigation Measure T-1, which includes specific intersection improvement actions to ensure acceptable LOS; Mitigation Measure T-2, which includes specific improvements for safe site access and off-site intersection turn late queuing; and the payment of development impact fees and the fair share contribution to the necessary intersection and roadway improvements.

The project would also require an irreversible commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section 4.12, *Public Services*, and Section 4.14, *Utilities and Public Services*, project impacts to these services and systems would not be significant.

Similarly, as discussed in Section 4.3, *Biological Resources*, Section 4.4, *Cultural and Tribal Cultural Resources*, Section 4.6, *Geology and Soils*, and Section 4.13, *Transportation*, potentially significant impacts to biological, cultural and tribal cultural resources, paleontological resources, and impacts from project traffic would be reduced to less than significant with implementation of mitigation measures. Therefore, project would not result in significant irreversible or unavoidable impacts.

6.2 Growth Inducement

CEQA Guidelines Section 15126(d) requires a discussion of a project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending on the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The project's growth inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

6.2.1 Population Growth

The project proposes development of residential and commercial uses in the form of a multi-family residential complex with amenities, a food garden with outdoor recreational amenities, and a hotel. These uses could cause an increase in Norco's population.

The multi-family residential portion of the project proposes 320 residential units comprised of one- to three-bedroom units. The project would generate an estimated 915 residents, based on analysis completed in the project-specific Air Quality and GHG Emissions Study (Appendix C), which estimates the number of project residents based on the proposed number of units and proposed gross building square footage for residential development (Appendix C).

Indirect population growth would occur from the commercial uses of the project, assuming all new employees relocate to Norco. As described in Section 4.2, *Air Quality*, and shown in Table 6-1, the project would require approximately 44 new employees. Using the average Norco household size of 3.23 residents, and assuming all project employees and their family relocate to Norco, the commercial uses could add up to 142 residents (DOF 2019).

Implementation of the project could add 1,057 new residents to Norco. According to SCAG's 2016 RTP/SCS, Norco's population is estimated to increase to 32,100 residents by 2040, which would be 5,200 more residents than the 2012 population of 26,900 residents (SCAG 2016). The population increase of 1,057 potential residents resulting from the project represents 20 percent of the total anticipated population growth of the City through 2040. Therefore, the population growth resulting from the project could be accommodated by the City under its current growth projections.

6.2.2 Economic Growth

The project would generate temporary employment opportunities during construction. However, construction of the project would not be growth-inducing from a temporary employment standpoint because construction workers would be expected to come from the existing regional work force.

The project would also add long-term employment opportunities associated with operation of the proposed multi-family residential complex, food garden, and hotel. Table 6-1 shows the potential increase in job opportunities from implementation of the project.

Table 6-1 Employment Increase Resulting from the Project

Project Use	Employee Rate	Proposed Size (sf)	Number of Employees
Multi-Family Residences[1]	1 per 40,332 sf	410,568	10
Regional Retail[2]	1 per 629 sf	8,700	14
Hotel	1 per 3,476 sf	70,000	20
Total			**44**

sf = square feet

[1] Low-Rise Apartments, Condominiums, and Townhouses used for proposed multi-family residences. Proposed size is based on gross square footage of proposed multi-family development.

[2] Other Retail/Svc land use subtype substituted for food garden portion of the project.

Source: SCAG 2001

SCAG's 2016 RTS/SCS forecasts that Norco would have 25,700 employees in 2040, for a net increase of 12,500 employees from 13,200 employees in 2012 (SCAG 2016). The 44 jobs anticipated to arise from the project's residential and commercial uses would be less than one percent of the 2040 growth forecast, and well within employment forecasts.

The proposed project would not be expected to induce substantial economic expansion to the extent that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development in or around Norco would be addressed as part of the CEQA environmental review for each of those development projects.

6.2.3 Removal of Obstacles to Growth

The project site is within a mostly urbanized area that is served by existing infrastructure. As discussed in Section 4.13, *Transportation*, and Section 4.14, *Utilities and Service Systems,* existing infrastructure in the City would be adequate to serve the project. Minor improvements to water, sewer, and drainage connection infrastructure would be needed to connect the existing facilities to the project site; such utilities connections would be sized to specifically serve the project. Additional minor improvements to the City right-of-way for site access would be needed for the proposed driveways located on Hamner Avenue and Third Street, but these improvements would not introduce new infrastructure to previously undeveloped areas outside of the project site. No new roads would be required to provide project site access. The project does not and would not provide direct vehicular access to the single-family residential neighborhoods adjacent to the west and south of the site. Because the project constitutes development within a mostly urbanized area and does not require major extensions of new infrastructure, project implementation would not remove an obstacle to growth nor affect the potential for significant future economic or population growth.

6.3 Energy Effects

Public Resources Code Section 21100(b)(2) and Appendix F of the CEQA Guidelines require that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy. Section 4.5, *Energy*, includes a discussion of the potential energy consumption and/or conservation impacts of the project. The project would consume electricity, natural gas, and fuel during construction and operation. However, the project would not place significant additional demand on Southern California Edison or Southern California Gas, and would comply with applicable conservation standards. Neither project construction nor operation would result in wasteful, inefficient, or unnecessary consumption of energy. The project would not conflict with or obstruct State regulations or the Norco General Plan Conservation Element policies aimed at encouraging energy efficiency.

7 Alternatives

CEQA requires an EIR to describe a reasonable range of alternatives to a project or to the location of a project that feasibly attains most of the project's basic objectives but avoids or substantially lessens any of the project's significant environmental impacts. CEQA also requires an EIR to evaluate the comparative merits of the alternatives. CEQA Guidelines Section 15126.6(a) requires EIRs to describe:

> …a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6(d)).

The CEQA Guidelines further require that the "no project" alternative be considered (CEQA Guidelines Section 15126.6(e)). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "shall also identify an environmentally superior alternative among the other alternatives" (CEQA Guidelines Section 15126.6(e)(2)).

7.1 Consideration of Alternatives

7.1.1 Attainment of Project Objectives

The objectives of a project must be considered in determining what alternatives should be considered in the EIR, as attainment of most of the basic objectives forms one of the tests of whether an alternative is feasible as discussion above. The City of Norco identified the following project objectives, as described in Section 2, *Project Description*:

1. To be consistent with the City's Housing Development Overlay, General Plan, zoning code, Norco Auto Mall Specific Plan, and the City's Strategic Plan.
2. To create a mixed-use, small-town village experience by combining residential, dining, hospitality, and gathering spaces that complement the City's equestrian lifestyle.
3. To promote the use of alternative modes of transportation such as horseback riding, biking, and walking between the project site and existing adjacent uses.

4. To use existing land resources more efficiently by providing a well-planned, infill project next to an established corridor on an underutilized, vacant site.
5. To diversify the City's economy with a project that:
   a. Provides new housing options for Norco residents, and attracts and maintains working professionals, families, Veterans, and retirees to achieve the goals of the City's General Plan Housing Element and towards meeting the City's Regional Housing Needs Allocation.
   b. Enhances public services and allows the City to be more fiscally sound by capturing additional transit occupancy tax revenues by leveraging the project site's prime location near I-15, job centers, and SilverLakes Park.
   c. Provides more amenities for local residents, workers, and visitors in the form of a food garden with outdoor entertainment, recreational amenities such as equestrian and pedestrian trails, play areas, and a public gathering space available for all Norco residents.

7.1.2 Summary of Project Impacts

The intent of this alternatives analysis is to consider options that could reduce the significant project impacts identified in Section 4, *Impact Analysis*. The project would result in potentially significant impacts with respect to biological resources (during construction), cultural and tribal cultural resources (during construction), paleontological resources (during construction), and transportation (during operations); no significant and unavoidable project impacts were identified.

7.2 Alternatives Considered but Rejected

As described above, CEQA Guidelines Section 15126.6(c) provides that the range of potential alternatives for the 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. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR.

An EIR is also required to identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process, and briefly explain the reasons underlying the lead agency's determination. The following alternatives were considered by the City of Norco, but are not evaluated further in this EIR for the following reasons:

- **Residential-Only Development:** An alternative that would develop only residential use was considered based on consistency with the existing Housing Development Overlay (HDO) zone that applies to the project site. According to City of Norco Municipal Code Section 18.64.10, a density bonus allowing residential development of up to a maximum 35 dwelling units per acre may be awarded to projects that provide equestrian facilities in conjunction with development of an HDO zone. Under this alternative, up to 669 residential units would be developed on the project site along with residential amenities and equestrian facilities. However, food garden and hotel uses would not be included. This alternative would only meet Objectives 1 and 5a; and would result in significant traffic impacts due to the greater number of project residents than compared to the project. Therefore, this alternative was dismissed from further consideration since it would not meet the most basic of project objectives and would potentially result in greater environmental impacts than identified for the project.
- **Auto-Centric Development**. An alternative that would develop only auto-centric uses was considered based on consistency with the Norco Auto Mall Specific Plan and the underlying C-G

zone. Under this alternative, residential or food garden uses would not be included. This alternative would only meet Objective 1. Therefore, this alternative was dismissed from further consideration since it would not meet the most basic of project objectives.

7.3 Alternatives Selected for Analysis

Based on the significant environmental impacts identified and the objectives established for the project, the following alternatives were selected for analysis:

- **No Project Alternative:** The project would not occur, and existing site conditions would remain.
- **Reduced Residential Density Alternative:** The same proposed uses would be constructed, with an approximately 30 percent reduction in residential units and building square footage for residential use. Under this alternative, a total of 226 residential units would be provided compared to 320 residential units for the project.
- **Reduced Food Garden Alternative:** The same proposed uses would be constructed, with an approximately 30 percent reduction in the square footage for food garden use. Under this alternative, a total of 6,090 square feet of buildings for the food garden would be developed compared to 8,700 square feet for the project.

Table 7-1 provides a brief overview of key characteristics of the alternatives compared to the project. The environmental impacts of each alternative are analyzed in Sections 7.3.1 through 7.3.3.

Table 7-1 Comparison of Project Alternatives' Buildout Characteristics

Feature	Project	Alternative 1: No Project	Alternative 2: Reduced Residential Density[1]	Alternative 3: Reduced Food Garden
Lot Area	19.1 acres	19.1 acres	19.1 acres	19.1 acres
Proposed Uses				
Residential	320 units	None	226 units	320 units
Food Garden	8,700 sf	None	8,700 sf	6,090
Hotel	120 rooms	None	120 rooms	120 rooms
Residential Density	29 du/a	None	20 du/ac	29 du/ac

sf = square feet; du/a = dwelling units per acre

[1] Residential unit reduction is based on application of 20 dwelling units/acre, which is the minimum density identified for the project site in the General Plan 2014-2021 Housing Element.

7.3.1 Alternative 1: No Project Alternative

a. Description

CEQA Guidelines Section 15126.6(e)(1) requires that the "no project" alternative be described and analyzed "to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project." The no project analysis is required to discuss "the existing conditions at the time the notice of preparation is published…as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (CEQA Guidelines Section 15126.6(e)(2)). "If the project is…a development project on identifiable property, the no

project alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. In certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment" (CEQA Guidelines Section 15126(e)(3)(B)).

As described in Section 2, *Project Description*, the project site is mostly undeveloped with exception to an RV sales lot located in the northeast portion of the project site. The remainder of the project site contains remnants of foundations with evidence of previous grading and development and is mostly vegetated with a few scattered trees. There are no permanent structures on the project site.

Under the No Project Alternative, the project site would remain vacant as it currently is and the RV sales lot would continue operating. The No Project Alternative assumes the proposed 320 residential units, 8,700 sf of food garden buildings and outdoor recreational amenities, and 120-room hotel are not constructed. No changes would be made to project site access, landscaping, utilities connections, or other site improvements associated with the project.

The No Project Alternative would not fulfill any of the project objectives because the existing site would remain underutilized, would not create a mixed-use space that complements the City's equestrian lifestyle, and would not provide housing, transit occupancy tax revenues, or commercial and recreational amenities for the City.

b. Impact Analysis

Aesthetics

The project site does not contain any scenic or aesthetic resources, and implementation of the project would not degrade public views of distant scenic resources or the visual character of the site, as discussed in Section 4.1, *Aesthetics*. Implementation of the No Project Alternative would not involve construction or the development of the site that would degrade distant scenic views. The project site would remain vacant and underutilized with exception of the existing RV sales lot. Under the No Project Alternative, there would be no new sources of light or glare. Therefore, aesthetic resource impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Air Quality

The project site is vacant and underutilized and does not contain any manufacturing or industrial uses that generate significant amounts of air pollutants. Implementation of the No Project Alternative would not involve construction or the development of the site that would result in criteria air pollutants, toxic air contaminants, or nuisance odors. Under the No Project Alternative, there would be no new air pollutant sources on the project site. Therefore, air quality impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Biological Resources

The project site does not contain any special-species plants, riparian habitat or water features, or sensitive communities as discussed in Section 4.3, *Biological Resources*. Implementation of the No Project Alternative would not involve construction or the development of the site. The No Project Alternative would have no impact on biological resource and no mitigation would be required. Therefore, biological resource impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Cultural and Tribal Cultural Resources

As described in Section 4.4, *Cultural and Tribal Cultural Resources*, there are no significant historical, cultural, or tribal cultural resources associated with or present on the project site. Likewise, there are no known human remains present on the project site. Implementation of the No Project Alternative would not involve construction or the development of the site. The No Project Alternative would have no impact on cultural or tribal cultural resources, and no mitigation would be required. Therefore, cultural and tribal cultural resource impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Energy

The project site is vacant and underutilized and does not contain any uses that consume energy resources with exception of the existing RV sales lot. Implementation of the No Project Alternative would not involve construction or the development of the site that would result in energy use. Under the No Project Alternative, there would be no new energy demand or consumption on the project site. Therefore, energy impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Geology and Soils

As stated in Section 4.6, *Geology and Soils*, the project site is not located on an active fault or unstable soils, and the project would not include the use of septic tanks for wastewater disposal. There are no known paleontological resources on the project site. However, the project site is located in an area with high sensitivity for paleontological resources. Implementation of the No Project Alternative would not involve construction or the development of the site, and no mitigation would be required. Therefore, geology and soil impacts specific to paleontological resources under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Greenhouse Gas Emissions

The project site is vacant and underutilized and does not contain any uses that generate GHG emissions with exception of the existing RV sales lot. Implementation of the No Project Alternative would not involve construction or the development of the site. Under the No Project Alternative, there would be no new GHG emissions on the project site. Therefore, GHG emissions impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Hazards and Hazardous Materials

As stated in Section 4.8, *Hazards and Hazardous Materials*, the project site and adjacent properties are not listed on any federal or State databases for hazardous waste or contaminated sites. The project site is not located in an airport land use compatibility zone or influence area. Implementation of the No Project Alternative would not involve construction or the development of the site that would alter project site hazards or result in the transport, use, or disposal of hazardous materials. Under the No Project Alternative, there would be no new hazards or hazardous materials on the project site. Therefore, hazards and hazardous materials impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Hydrology and Water Quality

As stated in Section 4.9, *Hydrology and Water Quality*, the project site is not located in a flood, seiche, or tsunami zone. Implementation of the No Project Alternative would not involve construction or the development of the site that would require erosion controls or new stormwater drainage systems. Under the No Project Alternative, there would be no new hydrology or water quality impacts on the project site. Therefore, hydrology and water quality impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Land Use and Planning

The project site has a General Plan land use designation of Specific Plan within the Housing Development Overlay (HDO), and zoning designations of HDO and Specific Plan (within the Norco Auto Mall Specific Plan Area) with an underlying zone of Commercial General. Implementation of the No Project Alternative would not involve construction or the development of the site. Under the No Project Alternative, there would be no new land use and planning impacts on the project site. Therefore, land use and planning impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Noise

The project site is vacant and underutilized and does not contain any uses that generate noise or groundborne vibration. Implementation of the No Project Alternative would not involve construction or the development of the site that would generate temporary or long-term noise and vibration impacts. Under the No Project Alternative, there would be no new noise or vibration sources on the project site. Therefore, noise and vibration impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Public Services

The project site is vacant and underutilized and does not contain any uses that impact public schools, City parks and recreation facilities, or other public facilities such as the library. As discussed in Section 4.12, *Public Services*, the project site is located in an area served by RCFD, RCSD, CNUSD, City parks, and other public facilities. Implementation of the No Project Alternative would not involve construction or the development of the site that would increase demand for public services. Under the No Project Alternative, there would be no new residents, food garden patrons, hotel quests, or uses on the project site. Therefore, public services impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Transportation

Implementation of the No Project Alternative would not change existing traffic conditions in the TIA study area. Two of the eight intersections included in the TIA (Appendix L) would continue operating at or below LOS E under existing conditions. Although the No Project Alternative would not add any additional trips to the TIA study area, this alternative would have a significant transportation impact because the transportation improvements included as mitigation for the project would not be implemented. Therefore, transportation impacts under the No Project Alternative would be greater than the project. (*Greater impact*)

Utilities and Service Systems

The project site is vacant and underutilized and does not contain any uses that impact existing utilities and service systems. Implementation of the No Project Alternative would not involve construction or the development of the site that would generate new demand for utilities and service systems. Under the No Project Alternative, there would be no new residents, food garden patrons, hotel quests, or uses on the project site. Therefore, utilities and service systems impacts under the No Project Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

7.3.2 Alternative 2: Reduced Residential Density Alternative

a. Description

Under Reduced Residential Density Alternative, residential density would be reduced to 20 dwelling units per acre (du/ac), which is the proposed density identified in the General Plan 2014-2021 Housing Element for the project site (City of Norco 2013). The Reduced Residential Density Alternative would provide a total of 226 residential units in the residential component of the project site (11.3 acres), which would be an approximately 30 percent reduction in residential units. The residential building footprints would be adjusted due to the reduced number of residential units, and the maximum residential building height would be 45 feet. Residential amenities such as the fitness center, pool, and common outdoor open spaces would also be reduced in size to accommodate a proportionate reduction in the residential population under the Reduced Residential Density Alternative. Space on the site resulting from reduced residential building footprints would be attributed to residential parking areas, parking space medians, and pedestrian walkways. The proposed food garden and outdoor recreational amenities and hotel uses would remain the same as proposed for the project. Therefore, the project site would be fully developed under the Reduced Residential Density Alternative.

The Reduced Residential Density Alternative would fulfill all the project objectives, though to a lesser extent for Objectives 4 and 5a which aims to use the underutilized project site in an efficient manner and to provide housing options to attract and retain Norco residents, respectively. This alternative includes the same mixed uses as the project, which would be compliant with existing General Plan land use and zoning designations for the project site.

b. Impact Analysis

Aesthetics

Implementation of the Reduced Residential Density Alternative would change the visual character of the project site due the construction and operation of residential, food garden, and hotel uses. However, the reduction in residential units would result in a reduced footprint of residential buildings with a maximum building height of 45 feet. Therefore, the height of the buildings would be the same under the Reduced Density Alternative as the project. Development of the food garden and hotel uses would be the same as the project, and outdoor recreational amenities associated with the food garden would also be provided. Similar to the project, the Reduced Residential Density Alternative would not degrade public views scenic resources or the visual character of the site, and the buildings would have a Western aesthetic as proposed for the project.

Similar to the project, buildings and uses under the Reduced Residential Density Alternative would create new light sources from interior and exterior illumination associated with the residential, hotel, and food garden and security lighting in parking areas; and glare from lighting and building finish surfaces such as glass and metals. Like the project, the Reduced Residential Density Alternative would not require mitigation with adherence to State and local requirements limiting light trespass and use of reflective materials. Therefore, aesthetic resource impacts under the Reduced Residential Density Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Air Quality

Implementation of the Reduced Residential Density Alternative would generate air pollutants during construction and operation of residential, food garden, and hotel uses. However, the 30 percent reduction in residential units would result in less criteria air pollutants during construction and operation as compared to the project. Development of the food garden and hotel uses would be the same as the project, and outdoor recreational amenities associated with the food garden would also be provided. Similar to the project, no mitigation would be required, and criteria air pollutant emissions would be reduced as compared to the project. Therefore, air quality impacts under the Reduced Residential Density Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Biological Resources

Implementation of the Reduced Residential Density Alternative would still require site preparation and grading on a project site that is mostly vacant, and construction impacts could still adversely affect burrowing owls or nesting birds. Development of the entire project site is assumed under the Reduced Residential Density Alternative. The footprint of residential buildings would be reduced and space resulting from reduced residential building footprints would be attributed to residential parking areas, parking space medians, and pedestrian walkways. Development of the food garden and hotel uses would be the same as the project, and outdoor recreational amenities associated with the food garden would also be provided. Mitigation would be required for the Reduced Residential Density Alternative. Therefore, similar to the project, biological resource impacts under the Reduced Residential Density Alternative would be less than significant with mitigation. (*Similar impact*)

Cultural and Tribal Cultural Resources

Implementation of the Reduced Residential Density Alternative would still require ground disturbing activities, such as grading and excavation, to develop the 266 residential units, food garden and outdoor recreational amenities, and hotel. Construction activities would have the potential to unearth and adversely impact previously unidentified cultural and tribal cultural resources or human remains. Therefore, as with the project, mitigation would be required to ensure impacts to previously unidentified cultural and tribal cultural resources or human remains are less than significant. Therefore, similar to the project, cultural and tribal cultural resource impacts under the Reduced Residential Density Alternative would be less than significant with mitigation. (*Similar impact*)

Energy

Implementation of the Reduced Residential Density Alternative would result in consumption of energy during construction and operation. However, the 30 percent reduction in residential units would result in less energy consumption due to fewer residential units and residents than compared to the project. Development of the food garden and hotel uses would be the same as the project, and outdoor recreational amenities associated with the food garden would also be provided. Similar to the project, no mitigation would be required and energy consumption would be reduced as compared to the project. Therefore, similar to the project, energy impacts under the Reduced Residential Density Alternative would be less significant. (*Less impact*)

Geology and Soils

Implementation of the Reduced Residential Density Alternative would still require ground disturbing activities, such as grading and excavation, to develop the 266 residential units, food garden and outdoor recreational amenities, and hotel. Similar to the project, construction activities would have the potential to unearth and adversely impact previously unidentified paleontological resources since the project site is located in an area with high sensitivity for paleontological resources. Similar to the project, mitigation would be required to ensure potential impacts would be less than significant. Therefore, similar to the project, geology and soil impacts specific to paleontological resources under the Reduced Residential Density Alternative would be less than significant with mitigation. (*Similar impact*)

Greenhouse Gas Emissions

Implementation of the Reduced Residential Density Alternative would generate GHG emissions during construction and operation of residential, food garden, and hotel uses. However, the 30 percent reduction in residential units would result in less GHG emissions as compared to the project. Development of the food garden, hotel uses, and recreational amenities would be the same as the project. Similar to the project, GHG emissions generated under the Reduced Residential Density Alternative would not require mitigation. Therefore, GHG emissions impacts under the Reduced Residential Density Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Hazards and Hazardous Materials

The project site and adjacent properties are not listed on any federal or State databases for hazardous waste or contaminated sites; nor located in an airport land use compatibility zone or

influence area. Similar to the project, residential, food garden, and hotel uses under the Reduced Residential Density Alternative would not routinely transport, use, or dispose of hazardous materials, though storage and use of limited quantities of materials such as cleaning supplies, paints, and other products would be required for building maintenance. Similar to the project, impacts to hazards and hazardous materials under the Reduced Residential Density Alternative would not require mitigation. Therefore, hazards and hazardous materials impacts under the Reduced Residential Density Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Hydrology and Water Quality

Implementation of the Reduced Residential Density Alternative would require a SWPPP during construction activities, and implementation of BMPs and a stormwater drainage system to accommodate storm event flows during operations. Though the Reduced Residential Density Alternative would result in a 30 percent decrease in the number of residential units than compared to the project, the project site would be fully developed and require similar controls (such as the SWPPP and stormwater drainage system) as those included in the project, to ensure impacts to hydrology and water quality are less than significant without mitigation. Therefore, hydrology and water quality impacts under the Reduced Residential Density Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Land Use and Planning

Implementation of the Reduced Residential Density Alternative would develop the site with residential, food garden, and hotel uses which are allowed under current General Plan land use and zoning designations, similar to the project. Amendments to the General Plan or zoning regulation would not be required to implement the Reduced Residential Density Alternative and uses would be consistent with applicable policies in the SCAG 2016 RTP/SCS, the Norco General Plan, and Norco Auto Mall Specific Plan; no mitigation would be required. Therefore, land use and planning impacts under the Reduced Residential Density Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Noise

Similar to the project, implementation of the Reduced Residential Density Alternative would generate temporary construction noise and vibration impacts, and long-term operational noise impacts from residential, food garden, and hotel uses. Traffic noise generated under the Reduced Residential Density Alternative would be reduced as compared to the project due to 30 percent fewer residents. Noise and vibration impacts generated under the Reduced Residential Density Alternative would not require mitigation and would result in reduced traffic noise as compared to the project. Therefore, noise impacts under the Reduced Residential Density Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Public Services

Implementation of the Reduced Residential Density Alternative would increase demand for public services from residential, food garden, and hotel uses. As discussed in Section 4.12, *Public Services*, the project site is located in an area served by RCFD, RCSD, CNUSD, City parks, and other public facilities. The 30 percent reduction in residential units would result in less demand for public services than compared to the project due to fewer residents. Development of the food garden,

hotel uses, and recreational amenities would be the same as described for the project. Similar to the project, the demand for public services under the Reduced Residential Density Alternative would not require mitigation. Therefore, public services impacts under the Reduced Residential Density Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Transportation

Implementation of the Reduced Residential Density Alternative would result in fewer residential trips due to the 30 percent reduction in residential units. However, as shown in Table 4.13-3 in Section 4.13, *Transportation*, two of the eight intersections currently operate at or below LOS E, and would continue to do so with trips generated under the Reduced Residential Density Alternative. Therefore, the Reduced Residential Density Alternative would still require mitigation to ensure study area intersections operate at an acceptable LOS, safe access to the project site, and ensure adequate queue distances for off-site intersections in the vicinity of the project site. However, the degree of impact to intersection operation or intersection queuing under the Reduced Residential Alternative would be less than the project. Therefore, transportation impacts under the Reduced Residential Density Alternative would be less than significant with mitigation and reduced as compared to the project. (*Less impact*)

Utilities and Service Systems

Implementation of the Reduced Residential Density Alternative would generate demand for utilities and service systems from residential, food garden, and hotel uses. The 30 percent reduction in residential units would result in less potable water consumption and wastewater and solid waste generation than compared to the project due to fewer residential units. Development of the food garden, hotel uses, and recreational amenities would be the same as described for the project. The demand for utilities and service systems under the Reduced Residential Density Alternative would not require mitigation and would result in less demand as compared to the project. Therefore, utilities and service systems impacts under the Reduced Residential Density Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

7.3.3 Alternative 3: Reduced Food Garden Alternative

a. Description

Under the Reduced Food Garden Alternative, the food garden building square footage would be reduced by approximately 30 percent. The Reduced Food Garden Alternative would provide a total of 6,090 square feet of buildings for the food garden compared to 8,700 square feet for the project. The reduced food garden square footage would result in fewer food garden buildings and the seating capacity for food garden patrons would be reduced by 30 percent. Space on the site resulting from reduced food garden buildings would be attributed to the outdoor recreational amenities associated with the food garden. Residential and hotel developments would remain the same as proposed for the project. Therefore, the project site would be fully developed under the Reduced Food Garden Alternative.

The Reduced Food Garden Alternative would fulfill all the project objectives, though to a lesser extent for Objectives 4 and 5c which aims to use the underutilized project site in an efficient manner and to provide more food, recreational, entertainment, and equestrian amenities to Norco residents and visitors, respectively. This alternative contains the same mixed uses as the project, which would be compliant with existing General Plan land use and zoning designations for the project site.

b. Impact Analysis

Aesthetics

Implementation of the Reduced Food Garden Alternative would change the visual character of the project site due the construction and operation of residential, food garden, and hotel uses. However, the 30 percent reduction in food garden square footage would result in fewer food garden buildings and seating capacity for food garden patrons. Development of the residential and hotel uses would be the same as described for the project, and outdoor recreational amenities associated with the food garden would increase from the additional space resulting from food garden building reduction. Similar to the project, the Reduced Food Garden Alternative would not degrade public views scenic resources or the visual character of the site, and the buildings would have a Western aesthetic as proposed for the project.

Similar to the project, buildings and uses under the Reduced Food Garden Alternative would create new light sources from interior and exterior illumination associated with the residential, hotel, and food garden and security lighting in parking areas; and glare from lighting and building finish surfaces such as glass and metals. Like the project, the Reduced Food Garden Alternative would not require mitigation with adherence to State and local requirements limiting light trespass and use of reflective materials. Therefore, aesthetic resource impacts under the Reduced Food Garden Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Air Quality

Implementation of the Reduced Food Garden Alternative would generate air pollutants during construction and operation of residential, food garden, and hotel uses. However, the 30 percent reduction in the food garden buildings would result in less criteria air pollutants during construction and operation as compared to the project. Development of the residential and hotel uses would be the same as described and analyzed for the project, and outdoor recreational amenities associated with the food garden would also be provided. Similar to the project, no mitigation would be required, and criteria air pollutants emissions would be reduced as compared to the project. Therefore, air quality impacts under the Reduced Food Garden Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Biological Resources

Implementation of the Reduced Food Garden Alternative would still require site preparation and grading on a project site that is mostly vacant, and construction impacts could still adversely affect burrowing owls or nesting birds. Development of the entire project site is assumed under the Reduced Food Garden Alternative. The food garden would contain fewer buildings and a 30 percent reduction in seating capacity for food garden patrons. Additional space resulting from reduced food garden buildings would be attributed to the outdoor recreational amenities associated with the food garden. Development of the residential and hotel uses would be the same as described for the project. Mitigation would still be required for the Reduced Food Garden Alternative. Therefore, similar to the project, biological resource impacts under the Reduced Food Garden Alternative would be less than significant with mitigation. (*Similar impact*)

Cultural and Tribal Cultural Resources

Implementation of the Reduced Food Garden Alternative would still require ground disturbing activities, such as grading and excavation, to develop the 320 residential units, food garden and outdoor recreational amenities, and hotel. Construction activities would have the potential to unearth and adversely impact previously unidentified cultural and tribal cultural resources or human remains. Therefore, as with the project, mitigation would be required to ensure impacts to previously unidentified cultural and tribal cultural resources or human remains are less than significant. Therefore, similar to the project, cultural and tribal cultural resource impacts under the Reduced Food Garden Alternative would be similar less than significant with mitigation. (*Similar impact*)

Energy

Implementation of the Reduced Food Garden Alternative would result in consumption of energy during construction and operation. However, the 30 percent reduction in the food garden building footprint and seating capacity would result in less energy consumption due to fewer food garden buildings and patrons than compared to the project. Development of the residential and hotel uses would be the same as described for the project, and outdoor recreational amenities associated with the food garden would also be provided. Similar to the project, no mitigation would be required, and energy consumption would be reduced as compared to the project. Therefore, similar to the project, energy impacts under the Reduced Food Garden Alternative would be less than significant. (*Less impact*)

Geology and Soils

Implementation of the Reduced Food Garden Alternative would still require ground disturbing activities, such as grading and excavation, to develop the 320 residential units, food garden and outdoor recreational amenities, and hotel. Similar to the project, construction activities would have the potential to unearth and adversely impact previously unidentified paleontological resources since the project site is located in an area with high sensitivity for paleontological resources. Similar to the project, mitigation would be required to ensure potential impacts would be less than significant. Therefore, similar to the project, geology and soil impacts specific to paleontological resources under the Reduced Food Garden Alternative would be less than significant with mitigation. (*Similar impact*)

Greenhouse Gas Emissions

Implementation of the Reduced Food Garden Alternative would generate GHG emissions during construction and operation of residential, food garden, and hotel uses. However, the 30 percent reduction in the food garden building footprint and seating capacity would result in less GHG emissions as compared to the project. Development of the residential and hotel uses, and recreational amenities would be the same as the project. Similar to the project, GHG emissions generated under the Reduced Food Garden Alternative would not require mitigation. Therefore, GHG emissions impacts under the Reduced Food Garden Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Hazards and Hazardous Materials

The project site and adjacent properties are not listed on any federal or State databases for hazardous waste or contaminated sites; nor be located in an airport land use compatibility zone or influence area. Similar to the project, residential, food garden, and hotel uses under the Reduced Food Garden Alternative would not routinely transport, use, or dispose of hazardous materials, though storage and use of limited quantities of materials such as cleaning supplies, paints, and other products would be required for building maintenance. Similar to the project, impacts to hazards and hazardous materials under the Reduced Food Garden Alternative would not require mitigation. Therefore, hazards and hazardous materials impacts under the Reduced Food Garden Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Hydrology and Water Quality

Implementation of the Reduced Food Garden Alternative would require a SWPPP during construction activities, and implementation of BMPs and a stormwater drainage system to accommodate storm event flows during operations. Though the Reduced Food Garden Alternative would result in a 30 percent decrease in the square footage of food garden buildings and seating capacity than compared to the project, the project site would be fully developed and require similar controls (such as the SWPPP and stormwater drainage system) as those included in the project, to ensure impacts to hydrology and water quality are less than significant without mitigation. Therefore, hydrology and water quality impacts under the Reduced Food Garden Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Land Use and Planning

Implementation of the Reduced Food Garden Alternative would develop the site with residential, food garden, and hotel uses which are allowed under current General Plan land use and zoning designations, similar to the project. Amendments to the General Plan or zoning regulation would not be required to implement the Reduced Residential Density Alternative and uses would be consistent with applicable policies in the SCAG 2016 RTP/SCS, the Norco General Plan, and Norco Auto Mall Specific Plan; no mitigation would be required. Therefore, land use and planning impacts under the Reduced Food Garden Alternative would be less than significant and similar as compared to the project. (*Similar impact*)

Noise

Similar to the project, implementation of the Reduced Food Garden Alternative would generate temporary construction noise and vibration impacts, and long-term operational noise impacts from residential, food garden, and hotel uses. Traffic noise generated under the Reduced Food Garden Alternative would be reduced as compared to the project due to 30 percent fewer food garden patrons. Noise and vibration impacts generated under the Reduced Food Garden Alternative would not require mitigation and would result in reduced traffic noise as compared to the project. Therefore, noise impacts under the Reduced Food Garden Alternative would be less than significant and reduced as compared to the project. (*Less impact*)

Public Services

Implementation of the Reduced Food Garden Alternative would increase demand for public services from residential, food garden, and hotel uses. The project site is located in an area served by RCFD,

RCSD, CNUSD, City parks, and other public facilities. The 30 percent reduction in food garden building square footage and seating capacity would reduce the number of food garden patrons. However, the number of residents would remain the same for the Reduced Food Garden Alternative as the project; therefore, demand for public services would be similar to the project. Similar to the project, the demand for public services under the Reduced Food Garden Alternative would not require mitigation. Therefore, similar to the project, public services impacts under the Reduced Food Garden Alternative would be less than significant. (*Similar impact*)

Transportation

Implementation of the Reduced Food Garden Alternative would result in fewer food garden patron trips due to the approximately 30 percent reduction in food garden building square footage and seating capacity. However, as shown in Table 4.13-3 in Section 4.13, *Transportation*, two of the eight intersections currently operate at or below LOS E, and would continue to do so with trips generated under the Reduced Food Garden Alternative; site access improvements to Hamner Avenue and Third Street would still be required; and improvements to off-site intersections would also still be required to ensure adequate queuing distance in turn lanes. Therefore, the Reduced Food Garden Alternative would still require mitigation to ensure study area intersections operate at an acceptable LOS, safe access to the project site, and ensure adequate queue distances for off-site intersections in the vicinity of the project site. However, the degree of impact to intersection operation under the Reduced Food Garden Alternative would be less than the project. Therefore, transportation impacts under the Reduced Food Garden Alternative would be less than significant with mitigation and reduced as compared to the project. (*Less impact*)

Utilities and Service Systems

Implementation of the Reduced Food Garden Alternative would generate demand for utilities and service systems from residential, food garden, and hotel uses. The 30 percent reduction in food garden building square footage and seating capacity would result in less potable water consumption and wastewater and solid waste generation than compared to the project. However, the number of residents would remain the same for the Reduced Food Garden Alternative as the project; therefore, demand for utilities and service systems would be similar to the project. Similar to the project, the demand for utilities and services systems under the Reduced Food Garden Alternative would not require mitigation. Therefore, utilities and public services impacts under the Reduced Food Garden Alternative would be less than significant and similar to the project. (*Similar impact*)

7.4 Comparison of Alternatives

Table 7-2 provides a summary of whether each alternative's environmental impact is greater than, less than, or similar to that of the project for each of the issue areas that identified significant or potentially significant.

Table 7-2 Impact Comparison of Alternatives

Issue	Project	Alternative 1: No Project	Alternative 2: Reduced Residential Density	Alternative 3: Reduced Food Garden
Aesthetics	Less than Significant without Mitigation	<	=	=
Air Quality	Less than Significant without Mitigation	<	<	<
Biological Resources	Less than Significant with Mitigation Incorporated	<	=	=
Cultural and Tribal Cultural Resources	Less than Significant with Mitigation Incorporated	<	=	=
Energy	Less than Significant without Mitigation	<	<	<
Geology and Soils	Less than Significant with Mitigation Incorporated	<	=	=
Greenhouse Gas Emissions	Less than Significant without Mitigation	<	<	<
Hazards and Hazardous Materials	Less than Significant without Mitigation	<	=	=
Hydrology and Water Quality	Less than Significant without Mitigation	<	=	=
Land Use and Planning	Less than Significant without Mitigation	<	=	=
Noise	Less than Significant without Mitigation	<	<	<
Public Services	Less than Significant without Mitigation	<	<	=
Transportation	Less than Significant with Mitigation Incorporated	>	<	<
Utilities and Service Systems	Less than Significant without Mitigation	<	<	=

< Impacts would be less than the project

> Impacts would be greater than the project

= Similar level of impact to the project

7.5 Environmentally Superior Alternative

The CEQA Guidelines Section 15126.6 states that an EIR should identify the "environmentally superior" alternative. "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." As shown in Section 4, *Impact Analysis* of this EIR, there would be no significant and unavoidable impacts associated with the project. All significant and potentially significant project impacts would be reduced to less than significant levels with mitigation measures.

Each of the evaluated alternatives would result in lesser environmental impacts on some environmental resources and greater impacts on others compared to the project. None of the

alternatives presented would reduce all of the impacts associated with the project, as summarized in Table 7-2.

As stated above in the transportation impact discussion in Section 7.3.1, *No Project Alternative*, the No Project Alternative would result in greater impacts to study intersection LOS which currently operate at LOS E or lower and would continue to degrade without implementation of mitigation. However, the No Project Alternative, would be considered the environmentally superior alternative since it would eliminate impacts to biological resources, cultural and tribal cultural resources, and paleontological resources. As required by the CEQA Guidelines Section 15126.6(e)(2), if the No Project alternative is the environmentally superior alternative, another environmentally superior alternative must be identified.

When considering objectives, the project would best meet the purpose and need as identified by the City. Both the Reduced Residential Density Alternative and Reduced Food Garden Alternative would generally result in potential impacts that are similar to the project; however, both would result in less impacts to transportation than compared to the project due to the estimated reductions in vehicular trips. Furthermore, both alternatives would meet the basics of the project objectives, but to a lesser extent that the project.

On the balance, both the Reduced Residential Density Alternative and Reduced Food Garden Alternative are environmentally superior to the project due to the potential reduction in trips that would impact study area intersection LOS. However, both alternatives would result in similar potential impacts to biological resources, cultural and tribal cultural resources, and paleontological resources as the project since construction and operation of residential, food garden, and hotel uses would still occur. As summarized in Table 7-2, the Reduced Residential Density Alternative would be the environmentally superior alternative due to the reduction in project residents, which would result in a 30 percent reduction in impacts to public services and utilities and service systems than compared to the project or the Reduced Food Garden Alternative. While the Reduced Food Garden Alternative would result in a 30 percent reduction of food garden buildings and patrons, and therefore a reduction of impacts to public services and utilities and service systems than compared to the project, overall impacts would be similar to the project due to the provision of 320 residential units and the same number of anticipated residents that would generate similar demands for public services and utilities and system services. The 30 reduction of food garden patrons alone under the Reduced Food Garden Alternative would not result in a reduction of impacts to public services and utilities and service systems significant enough to be less than that of the project.

Therefore, the Reduced Residential Density Alternative would be environmentally superior due to the overall reduction in impacts to public services and utilities and service systems resulting from fewer residents than compared to the project and the other alternatives.

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